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ABSTRACT

Described is a program designed to present social awareness skills to moderately, severely, and profoundly mentally handicapped persons (beginning with ages 13-15 years) through group team play as well as through experiences in movement and physical activity. Of the several applicable teaching methods presented, behavior modification is discussed at length, and its effective use is considered of prime importance to the program's success. Descriptions of activities in the areas of locomotion, manipulation, relays, lead-up, and wheelchair games and exercises for strength, endurance, flexibility, and agility make up the bulk of the document. Each activity listing includes information on equipment needed, formation of participants, objectives, directions for play, and additional comments. (Author/SB)

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A PHYSICAL EDUCATION PROGRAM
FOR
ADULTS AND YOUNG ADULTS

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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DESIGNED FOR USE WITH MODERATELY, SEVERELY AND PROFOUNDLY MENTALLY RETARDED ADULTS AND YOUNG ADULTS BEGINNING WITH AGES 13 TO 15.

WRITTEN AND DEVELOPED BY:

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FOREWARD

The moderately, severely and profoundly retarded student, adult or young adult presents a special personality with special desires and needs for education. For this person the area of physical movement activity can be a most important area of concern in the educational process in the late school age years (14-18 years), and in the early adult years (18-30 years). During this age span the student is either preparing for a future working situation away from the school setting in a sheltered workshop or a community work situation; or is well into an adult life in a school-setting habilitation program.

The main thrust of this program of physical education is for those students in the low moderate, severe and profound mentally retarded categories. These persons are not able to benefit from a program geared for normal development with presentation and advancement steps for educable and upper moderately retarded students. They require programming, presentation and advancements which are at their level of understanding and functioning and 8-10 years behind their peers of normal intellect. A two sided approach must be made in order to reach these special students. The approach must be made strictly with relation to the needs of the student first as an adult or young adult; and secondly as an individual whose intellectual and cognitive development is less than half that of the student of the same chronological age. In addition to this, physical-orthopedic and neurological handicaps must be adapted for to fit the needs and objectives of the students and the program.

An effort has been made through this physical education program to suit the needs of these special students in a way never before attempted. It is the expressed desire of the writer to present a program of physical education which is part of a continuum of training and education in physical-motor movements, activities and skill development. This program is designed to present experiences in physical movement and action but also social awareness and social skills through group and team play. The student becomes aware of himself as a person and as a member of a group of people. The student is able to work with any group as a contributing member and not just as an individual within another group of individuals. For the more severely handicapped or retarded individuals this may mean a group of mentally retarded persons in as near a normalizing situation as can be made. With a high moderately retarded individual this may mean an active contribution to a group of normal or near normal peers in a community recreational activity. In either case it can and should be to the highest level of functioning to which the individual may be taken in a special education setting in the schools.

This physical education program was devised for use at Logan Center, which is a school and administrative center for the service of mentally retarded and handicapped citizens of St. Joseph County, Indiana. Its use is specifically designed for use within this school for the students served by the Council for the Retarded of St. Joseph County, Inc., and the South Bend Community School Corporation. However, it is hoped that the information and materials presented within can be used in whole or part by other schools or agencies dealing in the education of moderately, severely, and profoundly retarded citizens. Some parts of this program are presented in final form and some others remain to be completed. The wheelchair activity section is one of these, the test and evaluation section another. With the use and development of this program within this agency and others it is hoped that the further advancement and development of this program generally and those sections specifically can be made.

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To whom it may concern:

I am pleased to have recieved your request for this manual, A Physical Education Program For Adults And Young Adults. I truely hope that it may be of some benefit to you.
This program is specifically intended to be used with the student who, because of moderate to severe retardation, is not able to successfully participate in a normal physical education class. Under the circumstances imposed by the exercises and activities included in the program, the special individual will be able to become a part of a near-normalizing physical education program. This program for adults and young adults centers on group participation and socialization which is so necessary to the retarded student in this age group. It is the intended purpose to include each and every student in the physical education class. The handicap has little to do with the participation of the student because teaching motor skills is not the primary purpose of this program. All may successfully participate without the factor of a skilled performance as part of the participation. It is the inclusion of all members of the class in all activities which is of primary importance to the success of this program. Teaching methods are presented to provide some help to the teacher who may not be familiar with these factors of learning and how they relate to the retarded student, and motor skill learning.

This program was developed and is being used in a school for severely and profoundly mentally retarded children and adults. It is being used as a physical education program for students in the age ranges of 13 years and above. The program here also includes dressing before and showering following each gym class. It is suggested that these self-care activities be a part of the total use of this program.

It is my hope that the reader will find many uses for the information contained within. If the reader is already engaged in an effective program of this type, I hope there may be some additional suggestions and/or activities which may add to the already-existing program.

Your comments concerning the use and effect of the contents of this program are solicited. Please make all comments to the author at the address given.

Sincerly yours,

6 William E Thomas

William Thomas CCT

ACKNOWLEDGEMENTS

One man's ideas, though his own, are the compilation of many men's thoughts, writings, and actions. So it is with this program, the ideas and philosophy of this writer. Special acknowledgement needs to be given to persons whose works were used extensively in this program model.

The Educational Research Council of America has put out a Physical Education Program for the Elementary Grades K-6. This work was used as a guide and the activities and exercises were adapted for use in this program.

The section of this program dealing with methods contains information which was gleened from the writings of D.K. Brace "Studies of Motor Learning of Gross Bodily Motor Skills", and F.M. Henry "Specificity vs. Generality in Learning Motor Skills". In addition to these works the methods section relied upon the writings of Dr. Hugh McBride, Et al in the Supplementary Manual for the Training of the Severely Mentally Retarded.

An overall influence of organization of physical activities and program presentation was found in a book by Dr. David Gallahue Et al. This work and my brief association with him had an effect on this program and the continuing programs of physical education here at Logan School. To the above named people I give my thanks and acknowledge my use of their works in this program. Whatever effort I may have put into the writing and development of this Physical Education Program it is with no slight effort of those whose materials were of great help to me in this work.

Recognition and thanks must also be given to the students and staff of Logan School, Council for the Retarded of St. Joseph County, Inc., and the South Bend Community School Corporation who have contributed to this program by participation and continued interest in this program and its outcomes.

W.E.T.

INTRODUCTION

A Physical Education Program for Adults and Young Adults

The field of motor development seems to come to a progressive end for a retarded child at about age fourteen (14) years. From this time on educational considerations lie mostly in the areas of vocational and occupational performance. Factors involved here are especially related to social, intellectual and physical characteristics. The adult or near adult must be able to function in the society of normals as well as in the sheltered workshop situation. The physical and intellectual characteristics necessary for work and play must be developed.

This is not to say that motor development stops at the mid-teenage or that the person's functional level is reached. These two areas of development are personal factors of the individual and not necessarily common to any group. Motor development may stop, and most likely does, at the same time physical growth ceases (about 25 years of age). It is most difficult to say when intellectual and overall functional levels reach a peak for a mentally retarded person.

It is better to say that the prospective of the programming is altered to prepare the individual for a more satisfying adult life. Motor development is primarily concerned with preparing a strong base of motor patterns, abilities and skills. This is a highly specialized form of physical education. The area of physical education which will be presented here is concerned with skill development in games and sports with the objectives of advancement in social and physical fitness. Associated areas of concern are use of leisure time, good health practices and normalization of play and recreation pursuits.

This program of physical education will be designed to suit the needs of this group of mentally retarded individuals. Specifically, as related to this agency and school, the groups to be subject to this program are the pre-vocational, pre-vocational work study and Adult Rehabilitation classes. A brief description and special needs of each class will be discussed here.

Pre-Vocational Class

This group is composed of individuals of school age preparing for eventual placement in a sheltered workshop or community work situation. Their curriculum includes emphasis on numbers, form and shape descrimination, work attitudes and experience. The greatest emphasis is in the academic areas in order to build a base for eventual work placement. The approach is from a vocational standpoint.

As for the area of physical education their needs lie in the enjoyment of activities and the development of skills in individual and team games and sports. At this point, activity and skill development are foremost.

Pre-Vocational Work-Study

This class is highly vocationally orientated. They are close to placement in a workshop and near adult age. For the most part they are school age (16-18 years). Half their time is spent in an actual working situation within the agency's workshop. The second half of the day is spent in the school situation for academic work and physical activity (gym, swimming and bowling).

During the physical activity times they should be building a more refined appreciation or enjoyment of physical activity. Game and sport skills should be combined with their use in actual game situations. Emphasis is placed on team work and social acceptance and social needs of recreational activities. The program should be geared toward use of leisure time. Of course some adaptions must be made in normal games and activities to suit the abilities of the group and its individuals. But as much as possible the games, rules, equipment, etc. remain as they are played in a normal situation.

At most points the pre-vocational and pre-vocational workshop classes are very similar. Most objectives and needs given for each class relate to both. Consideration must be given to the individual's abilities and needs as they relate to game activity in the gym. In the area of health and self care this program will emphasize proper dress and showering along with the scheduled gym program. This will be detailed later, but in short, it means that the gym period will include time for dressing before class and showering after class. This requires an hour of scheduled time which has already been allowed for.

By this programming to provide training in physical education, health and recreation, it is the expressed goal of this program to build a basis in these areas which allows for a more complete and normal adult life for these individuals. This includes the working situation, sheltered or not, and the after-work hours use of leisure time which is so important to a full enjoyment of life.

Adult Rehabilitation

The Adult Rehabilitation class is made up of non-school age adults whose intelligence and functioning level is so low as to keep them from participating in the sheltered workshop situation. Their class work consists of concept formation and experience in all areas of normalization or near normalization abilities. For the most part even the simplest self care activities are not present. This then is a big part of their curriculum.

These individuals are placed in this situation due to the fact that developmentally the law of readiness was passed over or ignored. They are now at a point where their intellectual and functional capacities are few and possibilities for advancement are slight. Advancement lies in the area of habilitation to the world as it is and not in eventual growth of self care and occupation abilities. This is not to say that self care and occupation advancements are not important to these people. The importance of these two areas lies in their part in the overall habilitation program and not as separate areas of concern. A prospective look at this group reveals that some eventually may be able to receive placement in a sheltered workshop. Others, because of age or mental disturbance associated with mental retardation, may only be habilitated to the point where they can accept the world and function at a near normal level with limited self care skills.

Physically most of these individuals function at a low level. The locus of their programming, however, is not placed in motor development. The main objectives will be placed on their need and enjoyment of physical activity. The physical fitness and limited development of game skills is necessary. Foremost in game skills is the ability to play socially. This requires that the individuals relate to each other in group activities rather than an individual learning situation. Group participation in all this must be encouraged. Acceptance of group rather than individual needs must be developed.

The overall fitness and health of the client is also important. Exercise will be considered a necessity for these people. Of a secondary nature will be the development of physical-motor skills. As stated above, these skills will be simple game skills used in elementary sports and games. Specific objectives will include the concepts of body image, perception of direction, laterality and other areas related to perception and motor responses.

Program Objectives

1) To develop skills necessary to participate in individual and team sports and games.

This goal refers to the adult's need to get out and release energy in an exercise situation. The fulfillment of this goal means that each individual would be able to participate in sports and games in an enjoyable manner in order to provide recreation. These games may be in individual or group-team situations. No doubt the team-game activities are most desireable as a goal, and a balance of team and individual sports equally desireable. But if the adult is able to actively participate with one or two others in a sport, this is most adequate.

2) To increase overall health and physical fitness.

The building and maintenance of physical fitness is a continuing necessity throughout one's life-time. If the individual's fitness is adequate it is reasonable to assume that the overall health is also good. In addition it is a fact of the adult work-a-day life style that the person who is able to work at a peak rate for a longer period of time is most able to succeed. The fact applies equally to any level of functioning and possibly more so to the mentally retarded adult in a sheltered workshop or community employment situation.

Fitness may be defined as the overall capability to function at or above the level required for an individual's normal daily activities. Additionally this also requires an extra level of fitness above and beyond normal requirements to meet unexpected, emergency situations calling for an overload. This second factor is most important to fitness requirements. A person cannot be said to be fit without this overload capability.

Health enters when the individual becomes fit. He then is more likely to be healthy. Good eating habits, self care habits, sleeping and exercise routines are necessary to being healthy and physically fit. The program of showering and dressing for the young adult is aimed at developing good habits for self-care of the body.

3) To develop an enjoyment of physical movement in game activities.

This is related closely to objective one (1). If the student is to participate in individual and team sports there must be reasons other than for mere participation. The student must enjoy the movement involved in game participation. Secondary to this are such factors as competition, winning, social interaction, or skill development.

4) To increase the ability to work within a group.

The future or present adult must, of necessity, work within a group of some type as a contributing member. In the daily work situation the adult is part of the work force of the workshop, business or crew and must work within that group for the benefit of all as well as himself. It is this type of "teamwork" which is a necessary by-product of this program.

5) To aid in the increase of the academic and intellectual skills necessary for sheltered workshop or community employment.

Inherent in the physical education program is a unique means of teaching directly or enhancing everyday classroom academic learning. In a normal situation a physical education class may cover topics ranging from fields of Social Studies, History, Mathematics, and all areas of Science. These topics are covered as part of or closely associated with movement and movement learning.

For the Special Physical Education class the same capabilities exist. The academic skills may vary. The skills which will be used as part of this program will be number concepts, size and shape recognition and descrimination, colors and other perceptual concepts.

6) To provide base training for games and activities which can be used as recreational pursuits in adult life.

The purposeful and satisfying use of leisure time is one of the most important aspects of an adult's everyday life. Recreation is exactly what it says; re - creation of life. Leisure time should be used for rest, relaxation and play which satisfy and renew the individual's ability to work constructively and effectively. When the individual is able to play with others or individually in recreational pursuits he may then more effectively pursue daily tasks.

7) To provide opportunities to participate in more normalizing activities.

In a sense this objective encompasses all of the others as a main goal for the entire program. Normalization into the community of "normal" or non-mentally retarded or handicapped individuals is the most satisfactory goal of any program for our students. The mentally retarded child or adult has the same needs and desires anyone would possess. Normalization in all suitable areas can help fulfill those desires and needs and allow the child or adult to pursue a more satisfying lifestyle.

Normalizing activities are activities which best equal or approximate those a non-handicapped person would take part. The individual and the activity are adapted to suit the handicap but the results are the same for all. When the child or adult is given the skills necessary to successfully participate with respect to the handicap he receives the same stimulation and satisfaction as any other person. This satisfaction in turn allows the individual the opportunity to develop to the utmost potential and receive maximum enjoyment from life. Development of the highest potentials must be the most important goal of all our programming. Its achievement is primarily advanced by this objective.

Approach for Adult Rehabilitation Class

It is most important to recognize at this point that the preceeding objectives do not directly apply to the Adult Class. This class, for the most part, is beyond need for such basic objectives. Their basic abilities are few and potentials slight as compaired to the early and late teen-age groups. The relative importance of selected objectives are different. Although the objectives remain the same the approach and achievement of each will vary greatly from that of the pre-vocational and work-study classes. The variations of each will be given here.

1) To develop skills necessary to participate in individual and team sports and games.

This objective will apply to the higher functioning members of the class. Its use will be closely related to the achievement of number four (4).

2) To increase overall health and physical fitness.

This is an important objective in that the health and fitness if all of the class members is far below what it should be. Achievement will follow closely that of the younger groups but will be specially programmed to suit the Adult Class.

6) To develop an enjoyment of physical movement in game activities.

For this objective "game activities" will be dropped as a direct part of the objective. It will remain a part of the program to instill enjoyment of movement to any activity.

4) To increase the ability to work within a group.

This will become one of the more necessary objectives for the Adult Class. Beginning from a small group standpoint work will center around the individual's participation as a member of a group effort. This is more of an attempt to bring the class members "out of their shell" and give them the opportunity to expand their social sphere.

5) To aid in the increase of the academic and intellectual skills necessary for sheltered workshop or community employment.

Although community employment for all members of this class is unlikely, those who generally function on a higher level can be eventually moved into some part of the sheltered workshop situation. For these persons this objective remains the same. For the others the highest level of achievement in this area will be sought.

6) To provide base training for games and activities which can be used as recreational pursuits in adult life.

Although higher skill levels cannot be anticipated an effort will be made to develop abilities and skills necessary for pursuing some form of recreational activities. These will be much the same as the young adult classes but on a lower level.

7) To provide for opportunities to participate in more normalizing activities.

The same reasons for this objective apply as for the younger classes. However, as with number six (6) the level of expected training and development is lower than with the Adult Class.

METHODS

METHODS OF INSTRUCTION

Taking into account that we are working with adults or near-adults we must be sure to treat them as such, as nearly as is possible. The eventual importance to health and physical well-being promoted by exercise and recreation during adult life cannot be over emphasized. Recreational pursuits are possibly the most easily normalizing area of functioning available to the mentally retarded adult. It is our responsibility then to prepare them for many successful experiences in this area and provide them with the ability to receive adult satisfaction from a variety of recreational activities.

For these reasons and more it is most important that the teaching methods are effective and successful. These methods are no different than those used for normal students and should be educationally sound. Basically no one method or approach will be effective in all cases. For some individuals one method will work, for another the same method will prove useless. The same is true for activities or skills to be taught. So the teaching methods will vary with the student and the skill or skills to be taught. A number of applicable teaching methods will be presented here. These are given here as a basis for instruction and not as absolute, best methods. Any one or any part may be used for the effective teaching of motor skills. At some time two or more may necessarily be combined to teach a skill or as a means of reaching an individual. But, for the most part, the methods are used as they are presented and not in combination.

PREREQUISITES TO MOTOR LEARNING

As far as learning is concerned, to learn motor patterns and/or skills is no different than learning number concepts or any other academic concepts. There are a number of factors common to motor learning which require some explanation as a basis for an approach to teaching methods. These prerequisits to motor learning will follow. The inclusion of these factors precludes the development of the necessary environment in the student for learning. For the most part these factors are not present totally in all of the students affected by this program. Therefore it will be necessary to develop factors or adapt to suit the lack of one or more prerequisits. A brief description of each and/or an example of application will be given.

1) Motor Strength

Strength of the muscles, arms in particular, is most important as a prerequisit to motor learning. In order for a body to learn movement patterns it must have at least the minimum level of strength to move and support the required body parts. If a high degree of motor learning is to be taken in, a somewhat higher degree of muscular strength must first be present. It can be said that strength of muscles is probably the most basic of the prerequisits for learning.

2) Dynamic Energy

This is a form of energy which allows the individual to wholly put himself into a task. Dynamic energy is important to learning because with it the student is able to carry on a task without undue hesitation for unnecessary factors. These factors may be initial fear of failure, etc. The presents of these factors play a part in overcoming any task. In motor learning they can be passed over in teaching when the student's ability to control his body and its energy in motion are sufficient to allow initial attempts at learning movement. This dynamic energy continues to play a role in practice and eventually reaching higher levels of motor patterns and skills.

Dynamic energy is not meant to conote wreakless abandon or to relate with strength factors. It is a factor of the individual which allows easier learning and a factor which must be developed in the mentally retarded student. It can be partially developed by allowing for successful initial attempts at learning tasks, developing strength and confidence, and removing as much of the possibility of failure as can be logically done.

3) Ability to Change Direction - Agility

This one prerequisit may be given as two factors; ability to change direction and agility. These two are so closely related that they can be presented as one. Agility is oftentimes defined as the ability to change direction quickly. It is more broadly defined as the ability to move the body rapidly from one point to another. An agile movement from point to point may involve moving over, around, through or under objects, change of direction, and movement of the body quickly, efficiently, and effectively under all circumstances. Generally, agility can be said to be an efficient and effective use of the musculature of the body to accomplish a task. This last definition best suits our mentally retarded students. A mentally retarded person may never reach the skill level implied in the two former definitions. The latter definition allows for reaching the levels of movement ability prescribed in the more specific definitions but in a more general sense. This does not mean that requirements are being lowered, but only adapted to suit the various ability levels of the students.

Agility is usually related to movements which are gross in nature, involving large muscles. It can be fine motor agility, termed dexterity. For our purposes in this program gross motor agility will be used. Developing this form of movement prerequisite is accomplished by practice with attention, to the movement and the results of the movement, by the student and the teacher. In attempting a gross movement learning task the student needs to sense the movement of his body and what it is doing to accomplish the task. This sense comes from within and without the student. The student moves, senses movement, and senses the result - correct or not, from seeing or feeling the results and/or receiving outside stimulation from the teacher concerning the result. For example, a student throws a ball at a target. He senses the necessary movements of his body, arms, shoulder, hips, legs, and sees the result, hitting the target or not. The teacher must demonstrate and stimulate proper motions, reinforce correct responses, react to the result - (correct or incorrect,) motivate, reward, (negative or positive), and make corrections.

This is the most likely process which goes on in teaching and learning gross agility movements. Since the base factor described as the prerequisite is not always present this form of teaching will be a continuing process. When a base level of agility becomes present a more normal teaching-learning procedure may be used. As with each of these prerequisites a base level must be present to elicit a learning response. If not, then that level must be developed.

4) Flexability

Adequate flexability is a condition where the joints, muscles and ligaments are able to allow movement through the full range of motion. For our purposes this means that movements can be accomplished easily without strain or stress at the joints. This prerequisite applies especially to tumbling stunts and other movements which require above average movement of joints.

A good exercise program of strength and flexability training is the answer to lack of flexability as a prerequisite. If the student is unable to move as he should it stands to reason that he will also be unable to effectively learn new movements. Strengthening and stretching muscles is necessary to allow proper movement learning.

5) Good Vision - Occular Pursuit

This is almost a self-explanitory term. If a student cannot adequately see what he is to do it is impossible to expect an adequate performance. This applies to any handicap related to the senses, in particular, hearing and vision. In most cases the sensory handicaps must be adapted for in order to promote learning. It must be understood that some apparent handicaps may be related to selective sensory control as in hearing where the student conciously or unconciously chooses to listen or not. It is of primary importance here to be sure to accurately discriminate between a handicap and selective hearing.

Eye control is highly related with the ability to learn or perform a motor pattern. Eye control comes under the term occular pursuit, which is the ability to follow an object or maintain eye contact on an object, moving or stationary. Concentration or attention span may be related to the occular pursuit ability of the individual. This ability may be a function of mental-psychological or muscular control. The prerequisite factor of concentration will be discussed below. Simply the student does not concentrate on or attend to a task long enough to perform it adequately.

Another area concerned with vision is peripheral vision, the ability to see objects not in the direct line of vision. In a sense this factor could also be involved with occular pursuit and concentration. Peripheral vision has been related with learning especially in athletic skills.

For the most part, vision, occular pursuits, and peripheral vision are in-born factors which cannotbe appreciably changed or corrected. Occular pursuit skill can be developed with practice if it is related to muscular or mental-psychological difficulty. However, if neurological damage is present, it is unlikely that correction is possible. In this case adaption must be made to work around the adaptability in visual functioning. This is usually accomplished by substituting one sense for the loss or impairment of another. With visual difficulties auditation and tactual senses are usually substitutes used in teaching and learning motor patterns.

6) Concentration - Attention Span

The child's attention span is a function of time or quantity of attention where concentration is a function of the quality of attention. If a student is able to concentrate on a task for increasing periods of time we can then say that the attention span is increasing. The quality and quantity of attention is then developing. A student who is able to maintain a good quality and quantity of attention on a task will more likely learn that task - motor pattern. Conversly, a child unable to maintain adequate attention will not learn, no matter how hard he may try.

This important prerequisite to learning can be developed or taught. Activities and tasks can be given which are able to develop concentration and an increase in attention span. This must be instituted in order for eventual learning to take place.

There are a few concepts of attention or concentration which must be discussed here. These eight concepts are: redundancy, irrevelentcues, fading, criterian, over-learning, easy-to-hard sequences, failure sets, and novelty. Their use comes in teaching motor patterns and overiding difficulty in attention and/or maintenance of attention span.

Redundancy is a factor which comes into play when two stimuli or dimentions of learning are consistantly presented together in a teaching-learning situation. The more cues a student has in learning a task the faster he will actually learn that task. It has been proven that learning occurs faster as the number of redundant relevant stimuli increases. (Stevens page 427). A motor pattern has built in stimulation in the sensation of movement. Along with this redundant cues can be added by the teacher or other stimuli in the environment. These, of course, must remain consistant in their presentation and use.

A student, especially a mentally retarded student, learns best when he is able to take advantage of a number of relevant redundant cues without having to deal with additional irrelevant cues. A child can only be concerned with a limited number of stimuli which enter into the teaching-learning situation, by choice or not, and make eventual learning difficult. In other words, a student learns best when teaching stimuli are most directly related to the learning objectives. It is important to keep unnecessary, irrevelent cues to a minimum in the teaching-learning environment.

Sometimes the use of a "crutch" to aid learning needs to be facilitated to overcome attention-concentration difficulties. A "crutch" of this type is termed fading. Fading is related to redundant cues in that the consistant use of a previously learned concept is used to present a new learning task. Gradually, the aid is taken away, faded out, so that more attention, and thus learning, is given to the new concept to be learned. Because of the nature of motor learning a number of concepts from areas other than motor learning may be used as a crutch.

To say that learning has truly taken place we must have some measure of what learning is. Thus we must set some criterian for what will be considered a learned task or movement pattern. An objective must be set, say to walk up the stairs without assistance, and criterian developed which tell the teacher when the learning objective has been adequately achieved. The criterian for our objective could be that the student is able to achieve the objective without support, walk up and down stairs, is able to do this six times without falling. When these criterian are reached the objective is said to be achieved and learning has taken place. As with the objective the criterian must be reasonable and reachable. It is the setting of proper criterian which helps keep attention to the task. If criterian are set too high or too low, the learning task does not hold the attention of the student and learning does not take place.

Once a task has been learned according to the pre-set criterian it is best to continue teaching-learning procedures. The act of going beyond initial learning is referred to as over-learning. Overlearning is the continuation of learning activities past learning. When there are many errors in the over-learning stage the criterian for initial learning are too weak. For this reason over-learning can be a check on the criterian's ability to distinguish learning.

The actual importance of over-learning lies in two areas. When the student is subjected to over-learning of a task he is much more able to retain successful performances of that task. Secondly the more complete learning of a task allows for that task or parts of it to be used as a factor in learning related skills or patterns, such as the "crutch" used in fading.

A research finding in the area of discrimination learning which is applicable to motor learning, is easy-to-hard sequencing. By this procedure an eventual learning task is broken down into easier steps leading up to the successful performance of the desired task. As this relates to motor learning, a task such as walking the length of a four inch balance beam without stepping off may be learned easier. At first a wider board is used and outside support is given. Gradually the student is asked to achieve the task using more of his own support and to walk on increasingly narrow boards. This then proceeds from the relatively simple task of walking a wide board with much support, to walking the narrow, four inch board without support, which proves to be a difficult task (even for some so called "normal" teachers).

This use of sequencing simple to hard tasks maintains the students interest and attention as learning takes place. It also reduces the possibility of the formation of failure sets. A failure set is a common factor in the learning of many mentally retarded students. When failures are piled one upon the other in difficult tasks the student will often fail to successfully undertake the most simplest task.

This piling on of unsuccessful tasks is referred to as a failure set. When a failure set is formed the child ceases to attend to the relevent stimuli of the task. This makes for continued failure and only adds to the problem of learning. Materials and procedures should be programmed so as to minimize the student's experience of failure. (Stevens page 431).

When arranging easy-to-hard sequences for learning, for example, it is best to keep the tasks within the ability level of the individual student. Proceed ahead only when the student has successfully achieved the simplier task and is ready to take on the next most difficult task with same degree of success. It is also important to maintain a positive position in relation to success or failure. A student should not be told he is wrong but allowed to attempt the task again another way. Thus emphasizing success rather than failure.

This is not to say that the mentally retarded student should not be allowed to experience failure. Failure at some things is a normal part of life. We are said to learn by failure, as well as success. It is therefore important to only make the possibility of success a little more. By doing this in a manner which is not obvious to the student we increase his ability to learn and to raise his eventual standard of normalization.

A final concept of attention-concentration is the factor novelity. A novel event serves as a powerful attention-attracting control variable. Oftentimes learning tasks may become boring and tedious to the student. This serves to lessen the possibility of eventual learning. A new, related concept or factor put into the learning task serves to revive interest and maintain overall attention to learning. Novelity is especially helpful in overcoming already formed failure sets. It also lessens the chances of the subsequent formation of failure sets. "In general, unless an adequate level of stimulus variability is maintained during a training session, children will cease to attend." (Stevens page 431). Relating back to earlier concepts of attention-concentration, a novel factor must be both relevant and redundant to be of use in a learning situation.

7) Understanding of the Mechanics of the Techniques of the Activities

The first appearance of this factor is a bit misleading. It is unrealistic to expect most people to understand (or even care about) the theoretical and scientific mechanics of the technique of a skill, pattern, or activity.

Basically it is important only to know the actual techniques of the skill to be performed. Most movement patterns have an inner sensation and an outer sensation or resultant feeling. The inner sensation comes from the movement itself and is based upon the perception of the movement. The outside sensation comes from the teacher in the teaching-learning situation and the result, if any, in the practice situation. The technique is taught and trained. The understanding comes from the actual internal sensation of the movement pattern.

Understanding of technique and pattern for our students is concerned, for example, with knowing the difference between kicking and throwing. Also understanding the difference between an underhand and overhand throw. Mechanics will be concerned with knowing how to throw, or kick simply and with a degree of accuracy.

This understanding comes from teaching or training and the presentation of proper stimuli during the teaching-learning situation. Thus the development of a proper internal sensation and presentation of a good external sensation is all important to learning the movement pattern.

8) Absence of disturbing or Inhibiting Emotional Complications

For the mentally retarded student some form of emotional disturbance is almost always present. This usually presents an additional problem for learning. In most cases this prerequisite cannot be met and must be adapted for. The successful performance of physical-motor skills has a way of building and reinforcing self-confidence and feelings of worth. This can greatly lessen or correct most emotional difficulties. Often corrective or occupational therapy procedures are able to succeed where others have failed to elicit change.

Other emotional complications include fear of a new situation, fear of water or fear of height. In this case again, learning cannot take place until the fear is overcome. Steps to relieve fear must be slow. Great assurance must be given at all times. Fear of something may initially be great but with patience and support on the part of the teacher accomplishments can be made. The student will see that there is nothing to fear and accept the fact that he can work within the environment. From this point on learning will become most evident.

These then are prerequisites to motor learning, which are said to be necessary to even begin the teaching-learning process. It can also be seen that many of the prerequisites are not present in most mentally retarded students. For this reason these prerequisites must be first learned and ingraved or adapted for so that effective motor learning can take place.

FACTORS OF MOTOR EDUCABILITY

Once prerequisites are present there are eleven factors of motor educability. These are characteristics of the student which must be present so the learning process may effectively take place. These factors are closely related to the prerequisites listed above. Their development comes after the prerequisites have been developed. In a functional way these factors play a more important part in the actual teaching-learning process. The prerequisites set the basis for learning and these factors are the means of teaching and learning motor skills.

1. Insight into the nature of the skill.

This factor is based primarily on two things. One is the child's actual ability to understand directions and teaching. The second is the teacher's ability to get the point across to the student. Simply the student must be able to understand what he is to do to accomplish the movement task and how the movement is accomplished.

2. Ability to visualize spatial relationships.

The perceptual factor known as spatial awareness is one which is usually not present to an adequate degree in most brain-damaged students. This factor is one which must be understood and expected as one which may need to be adapted for. A student unable to distinguish between distances, gage depth or cope with the variety of stimuli in a large space is less likely to be able to learn.

Much concentration is necessary to work on developing and adapting spatial awareness. In many cases calling attention to the various aspects of the environment related to distance and space will prove to aid a student with spatial perception difficulties. The teacher must point out the cues or stimuli which are necessary for perception.

3. The ability to make quick and adaptive decisions.

In a game situation or in any set of circumstances where the student must move within an environment certain adaptions or corrections to the environment must be made. Walking around most classrooms calls for stopping so as not to bump into another person, moving around a chair and stepping over a box. All of these are changes in movement from a desired path. It is easy to see in a game activity with a class of students, all moving on their own prescribed course, where many alternatives of a desired path would need to be made. This same circumstance exists in the world outside the class, and would therefore be an important teaching objective.

In a simple skill activity, the student may be called upon to throw balls of varying sizes and weights. Adaptions of the throwing movement and the force exerted must be made in order to succeed in this task. Under teaching-learning conditions the student is asked to react to new situations and various stimuli. The reaction time should decrease as the student becomes accustomed to new and varying experiences. Additionally the student should learn that he is expected to perform and react more quickly. Pressure to improve should be applied here but not so that the student is asked to perform above his ability level.

4. Sensory motor coordination.

One instance of motor coordination is associated with adapting to new stimuli, as above. This is the motor coordination which is called upon to move after the immediate decision has been made. The student must sense a variation in size or weight of a ball, for example, then use whatever motor control is available to make the proper force and movement responses.

The most recognizable area of sensory motor coordination is the coordination of eye with head, hand or foot, most usually hand and foot.

This factor is more important in manipulation skills as far as kicking, throwing, or catching balls or other objects. The area of sensory motor coordination is concerned with any sensory imput with a resulting motor response. But as far as motor learning is concerned the above mentioned eye-extremity combinations are most frequently used.

5. General kinesthetic sensitivity and control.

Kinesthetic sensitivity is the ability to feel or sense movement and relative position in space. To perform a movement skill adequately requires the ability to be accurately aware of the bodily movement involved with that skill. For instance a student throwing a ball would need to know the position of his arm and hand in the arc of motion. This is necessary so that the point of release can be determined in order to hit a predetermined target. In another instance the individual would need to be aware of position in space while performing a forward roll. This would be necessary so that the student knows when to stop the roll and come to a standing position or cease rolling.

For our students this factor will prove to be most important. This due to the fact that some teaching will need to be accomplished by actually putting the child through the action. In order for this method to be effective it is necessary to provide cues to the student relating to his position or the position of a body part in space.

6. Ability to coordinate a series or combination of movements which follow one another in succession.

More than a factor in movement learning this can be said to be an objective for learning for most of our students. In the area of eventual employment a series of work tasks or a skill task to be accomplished would require the ability to coordinate a series or combination of movements, moving from one part of the task to another. Of course this relates in a broad sense to throwing a ball correctly. In the performance of this skill a step of the foot must be coordinated with the rotation of the hip and trunk along with the action of the shoulder, arm, wrist and hand in the actual throwing motion.

It is easy to see how these may relate to the performance of a work related task. When a skill involving a series of coordinated movements is learned its learning may be transferred to the learning of other skills or tasks requiring series movements. This is not a "crutch" but a sensory-motor group relationship. Part-Whole teaching must be used to institute this relationship.

7. Arm control.

The arms are used in many physical skills directly and indirectly. Their indirect use is seen in tumbling stunts which call for momentary arm support and in jumping for height or distance. Directly the arm is used most often in throwing and catching objects.

8. Factors involved in the functions of balance.

In general these factors are centered around three areas; the function of the eyes, the function of the semicircular canals of the inner ear, and physical or psyhcological tension.

The eyes play a most important roll in balance. They feed information to the brain telling the body where it is. The eyes do this by fixing on a stationary point or object. The information relayed to the brain concerns the body's position in relation to that point. When the position changes the brain tells the body what corrections to make in order to maintain balance.

Another factor, which has already been mentioned earlier but important here, is the kinesthetic senses and control of the body. Without these, balance would be nearly impossible.

The second factor is that of the inner ears function. The semicircular canals of the inner ear are the main sense organs of balance. They are constantly relaying information to the brain as to body position and balance. Any misconnection or loss of function in the inner ear or the ear itself may cause a dysfunction of this important balance mechanism.

It has been found that the height or position of a balance beam may cause excess tension or anxiety in the individual. This tension will cause difficulty in or inability to perform a skill on the balance beam. Also the heightened sensitivity of the balance mechanisms when the student is standing on the beam or other "unsure" surface may also cause this increased tension.

Together these factors play an important part in the learning and performance of balance skills in particular. But any skill which even minutely involves balance usually involves balance control.

9. Timing.

Timing can be related to coordination as a part of the sensory-motor function found in eye-hand control. Timing is that function of the coordinated movement which calls the sequential movements into play. With proper timing a smooth, coordinated motion is elicited rather than a jerky, uncoordinated motion. Timing of this sort can be best related to the timing chain and firing sequence of a car engine. The timing gear or chain will rotate the pistons so that they are at the right point to receive the power when combustion occurs.

Timing is also a sense of duration of time. This is not only important in motor-learning, but also in everyday life.

10. Motor rhythm.

Related to timing, motor-rhythm is the ability to feel and perform a sequential coordinated movement pattern. Motor rhythm is especially visual in gymnastic movements such as tumbling and apparatus stunts. Timing calls the movements into play and motor rhythm is what allows these movements to take place smoothly.

11. Esthetic feelings.

The pure enjoyment of movement is an important factor in motor learning. It also is important as an objective of motor learning. The positive attitude and internal motivation stemming from an enjoyment of movement is most important in learning movement patterns and skills.

It is a prime objective of this program to provide skills necessary to successfully participate in recreational activities and to enjoy movement for its own sake. When movement is enjoyed it is much easier to learn skills and enjoy participation. For these reasons this factor must be either present or instilled in the student.

The previous factors of motor learning are necessary for effective learning and efficient teaching. In all cases these factors must be present in the student. If not present they must be learned or brought out by one means or another. The absence of one factor or another does not mean that learning cannot take place, but only that it may be abnormally difficult.

The presentation and discussion of these prerequisites and factors of motor learning is for any and all persons using this program. The use of this information is necessary to the effective teaching of our students in the area of physical education as they are sound educational principles and based upon much testing and experience in learning in general and specifically motor learning.

Their actual use comes in the necessity for a total understanding of the student. The effective teacher requires a complete knowledge of the student's needs and activities. It is the purpose of the previous section to give the teacher a background into some of the needs and abilities of the student necessary for motor learning.

Whole-Part and Part-Whole Teaching

In the actual, down-to-earth, process of teaching there are any number of teaching methods. Two forms of presentation stand out as primary methods for teaching and ease of learning. These hold true for all students, normal, or not. The two means of presentation are closely related as defined, but their utility varies with the teaching-learning situation. The first of these, whole-part, part-whole teaching will be discussed here. The second, specific and general will be presented later.

Whole-Part

Whole-part teaching begins with the presentation and practice of the whole skill to be learned. From this point parts of the skill are taken for concentrated learning. In the teaching-learning situation the teacher would present the total skill, say throwing a ball, and the student would practice this skill totally without prior performance of seperate parts of the skill. The whole of the skill is then broken into its destinct parts. The student practices those parts which prove difficult to performance of the whole skill. Another program would have the student practice each part working toward the correct performance of the whole skill after performing the entire skill a few times. This form of teaching gives the student an intrinsic motivation from having performed the skill and seeing his mistakes and knowing the objective of the total movement skill to be performed. The student can more adequately practice the parts as he is able to visualize each part as a member of the whole.

Part-Whole

Opposite to the whole-part method is Part-Whole teaching. By this mode of teaching the student is first introduced and allowed to practice the parts of a movement skill. Each part is practiced and combined with previously learned parts. Completing the chain of parts allows total performance of the whole skill. Under these circumstances the total skill is not attempted until the student has learned each part seperately.

A look at the teaching-learning situation will explain this procedure. Taking the ball-throwing example the teacher would divide the skill into five or six seperate parts (drawback, point, throw-arm movement only, release, shoulder and hip movement, foot, step, and possible variations such as distance and a high or low target). For each part the teacher and student would need to go through the procedure of explaining the position and movement and practice each part. The preceeding parts would then be combined to form the total skill up to the point of learning and eventually to the performance of the entire skill.

By this method the student learns the entire skill and becomes adept at all of its parts. The end performance is a culmination of well defined movement patterns into an objective skill. Its process is more time consuming but possibly more rewarding as far as total learning is concerned in the eventful performance.

Whole-Part vs. Part-Whole

When looking at the overall benefits of both processes, each has its benefits and drawbacks. The whole-part method may produce initial failure, is not a complete learning process, but maintains continued motivation and reward. The Part-Whole does not facilitate intrinsic motivation, provides a complete form of learning, and is time-consuming. Each is a means of reaching the ultimate goal of learning a movement skill. The purposeful use of each varies with the needs and abilities of the teacher and the student. The needs and abilities of the student are of greatest importance and should be considered prior to the use of any teaching method.

For these reasons and more the whole-part method is best for our population of students. We have already assumed.."that the quickest learning, and thus the most satisfying learning occurs when a child (student) is taught a skill using the whole method rather than the part method."(Cratty page 46)*A mentally retarded student is known to learn much better when instructed by the whole-part method. However, an adapted definition of 'wholeness' must be made in order to suit this special population. A student, retarded or normal mentally, must be kept motivated to the learning task. The skill cannot be too difficult nor too simple, it cannot encompase an unwieldly number of variables nor so few that the skill is not challenging.

An adequate definition of wholeness for teaching the many levels of mentally retarded students would be that part of the skill which is most closely aligned to the student's ability to organize input data. This data could be portions of the skill of any size including the presentation of the entire skill. The portions would be presented equal to the ability of the student and considered a total skill. Parts of each portion may be defined and practiced in order to learn the skill. Each learned portion must be combined as members of the ultimate skill.

As an example the throwing skill can be designated as the ultimate skill and two or three portions of this ultimate skill can be made into seperate skills. The draw-back, point, throw-and-release parts can be a whole-portion of the skill and presented as such. The hip, shoulder and foot-step movements can be made a seperate movement skill whole and presented along with or succeeding the learning of the first portion. These two are combined into the learning of the ultimate skill of throwing a ball properly. This is a 'whole' separate from the previous two portions and is presented as such.

The whole method is the best to use with a mentally retarded student. It provides a continuous objective of which the student is aware and working toward. The teaching time is less than other methods and the method is more effective in practice. For our purposes this method of presentation of learning skills will be used. The whole-portion skills will be designed for each student individually and the ultimate skills will be designated as needed.

Specificity and Generality

We can teach specific skills or general skills or even attempt to teach both. To teach specific skills or abilities would mean we hope that the student transfers the skills to general skills or generalizes into other areas. To teach general skills or abilities means working toward transferance of general skills to specific. Now, if the preceeding hasn't thoroughly confused everyone maybe there is hope. If not the following will explain these two concepts and their use.

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Specificity vs. Generality

Most people use the terms agility and coordination for example as general abilities related to learning all motor skills. Using this form of thinking teachers have attempted to teach general agility and coordination or other factors of learning. (See the section on Factors of Motor Learning) in order to more easily teach more specific skills. It was the idea that if an individual possessed good general coordination or was especially agile he would more easily learn any or all motor skills.

A number of subsequent studies have proven this fact to be not so true. Although good general body agility and coordination are important for performing motor skills, they are not as important as once thought in learning motor skills. It is the physical-motor agility or coordination specific [illegible] the skill which is important to good motor learning. The possession of agility and coordination, or visual acuity, or kinesthetic sensitivity by the student in the throwing skill for instance makes the learning of that skill possible, easier or more difficult. It is the teacher's responsibility to recognize weaknesses in any one of the prerequisites or learning factors and attempt to stimulate the use and improvement of the existing weakness. This is the "teaching" which is required before actual skill learning can take place.

Therefore, general abilities do not count when the teaching of a specific skill, pattern, or ability is concerned. It is the specificity of motor learning factors which is important. Recognizing this one fact makes the act of teaching a mentally retarded student more complicated, more difficult, more challanging, and most rewarding.

Specific and General Practice

In a seperate vain, general or specific practice of a learning skill is a different matter. There can be a close relationship or generalization of transfer of already-learned skills. So practice of a specific skill or ability movement pattern will aid in the learning of other related patterns. Specific practice of a specific skill teaches that skill only. It is the learning of a specific skill which can be used to simplify the learning of related skills.

Specifically like patterns such as ball throwing-overhand and the overhand volley or serve in tennis are easily related and the practice of one will assist the learning of the other. It is in this sense only that specific learning can be generalized or related to a general group of movements. A movement skill group can be said to have similar primary bodily movements common to each member skill. The use of movement skills groupings is found in teaching techniques associated with fading, (described earlier), and the use of cues and teaching hints to the student. No degression into an explanation of movement skill groups will be attempted here as it is overcumbersome and unnecessary. Suffice it to say that a skill group is a combination of closely related skills.

Behavior Modification

The relationship between teacher and student requires certain factors from each. The teacher must hold the factors of knowledge, organization and presentation of the learning material. The student is required very little relative to those things asked of the teacher. A student may or may not possess all the necessities for learning. Those necessary for motor learning have already beenelaborated upon. During the discussions of prerequisites to and factors of motor learning it was stated that many mentally retarded students lack even the most common prerequisites or factors. Therefore these are teachable items and preclude any actual physical motor learning.

A second area of factors necessary for the student are those related to social and emotional behavior. A student's behavior during the teaching learning period may either assist or hinder learning. The behavior of both the student and the teacher are integral parts of the teaching - learning situation. The student reacts to the behavior of the teacher as the teacher reacts to the student. The outcome of the relationship is dependent upon the behavior of both. If and when the behavior of both teacher and student becomes positive toward learning, true teaching and true learning takes place.

With the teacher's predeveloped knowledge, organization and presentation should be the ability to project proper behavior and to elicit proper, acceptable behavior from the student. Afterall, what is the job of the teacher if not to prepare the student mentally, socially, emotionally and physically for life? Behavioral modification is then the means of teaching acceptable behavior as any other method of education is the means for teaching math, music, or physical education.

Behavior Modification In Use

Behavior modification is defined as a means of changing unwanted or unacceptable behaviors utilizing as a theoretical base already established concepts of learning theory and practice. Primarily these theories are based upon stimulis response or behavior consequence learning concepts. Many scientists, educators and other researchers have tested and successfully used these theories in many actual cases. The thoretical background is with animal behavior but the practical ability is with human rationality and behavior.

In the classroom the teacher deals with the observable or operant behavior of the student. This behavior is concrete and easily describable to another person. Examples of operant behavior are facial expressions, running, throwing objects, hitting, etc. Inoperant or respondent behaviors are those which are not observabe such as frustration, anxiety, fear, feelings the individual has in relation to the environment. respondent behaviors are mostly conditioned and involuntary responses as with Pavlov's dogs. Behaviors, operant or respondent, may be desireable, undesireable or neutral. Behavior modification in the classroom seeks .."to unlearn or extinguish problem behavior and to learn or reinforce new forms of behavior with positive and approved social consequences." (Long, Morse, Newman page 359) Undesireable behaviors are changed to desireable behaviors and neutral behaviors are not to be of concern.

The Method of Behavior Modification

Behavior modification in relation to education is a means of discipline of the child so that teaching and learning can occur. Discipline does not conote control, but refers to guidance of the student. When the student's behavior is such that it inhibits learning the behavior must be changed or modified so as to make teaching and learning possible. The student is guided through this change by the teacher to the benefit of both.

Three lists of sequential progressions are given which describe the organizational constructs for utilizing behavior modification. Of course before anything can happen the teacher or teachers must become aware, knowledgeable and have a positive attitude toward the principles and function of behavior modification. Once the teacher is committed to the use of this method the process of utility may take place. These lists are given as a guide and resource for setting up an individual program.

Goal construction is most important in behavior modification. First, malidaptive behavior must be identified; what behaviors inhibit the learning of the student? Second, look for environmental conditions which may be the cause of this behavior, third, modify the environment to eliminate the unwanted behaviors. Remember the teacher and the teacher's behavior are part of the environment for the student. One premise of most modification techniques is that the teacher must first change attitudes and behaviors so that the student may change.

When these three things are accomplished begin with the second phase. (1) Select an ultimate objective of behavior. This is an operant objective based upon the unwanted behaviors. The principles of all goal-setting must be followed here. (2) Prepare a series of tasks for teacher and student leading up to the consequences and stimuli to bring the student through these tasks or activities to the achievement of the goal. At the end when the goal is reached, the teacher is prepared to continue with other modifications or initiate other learning. The student at the end is prepared to take part in the teaching-learning process in a more acceptable manner.

The third list deals with the areas of behavior which must be covered in sequential order because of their importance to the student and his or her education. This list begins with attention of the student and ends with the mastery by the student of cognitive academic and physical skills. (1) attention-having to do with the attention and consentration of the student to the task. (2) response of the student to the environemnt, teacher, task, etc. (3) order of presentation, sequence, and common relationships (4) exploration in a multisensory dimension of experience with the environment (5) social-those behaviors which are acceptable (6) mastery of skills.

Following this sequential development of areas of interest for goal seeking means that the teacher cannot expect the student to respond appropriately unless he can attend properly for example. In this case modifications are necessary to increase attention and consentration to task, then work from that point and up the ladder to response. Each area of development is based upon the accomplishment of the preceeding areas, and must be presented in developmental order.

The purpose for presenting this sequential order of behaviors is to present a further insight into the development of the student. After all, this entire program is itself based on the development of the student. The teaching methods, teacher-student relationship, and all other facits of this program must be based upon social development factors and principles as well as good educational principles of learning. When we know the student and where he or she is developmentally we can more adequately teach that student.

The field of behavior modification has within it a number of terms which are oftentimes difficult to understand and almost never used in everyday language. Their use in language holds importance for the behaviorist and not for the practicioner of behavior modification techniques. For the former the terms are a way of life, for the latter they are a means of understanding so that their meanings may be put to use in the classroom. Many of these terms have already been used or will be used within this discussion. They will be defined in a seperate section.

Practical Methods of Modification

In practice behavior modification is used in a number of different ways depending upon the student, teacher, the environment, and all other situations past and present which relate to any or all of the other factors mentioned. Any use of behavior modification is a means of control and as such must be used by a person knowlegable of the techniques of behavior modification and the student.

It is easy to see that the aformentioned circumstances are not always possible. Therefore three simple and effective methods of behavior modification for control and shaping will be given here. The utility of each is presented in the sequence by which they should be used. That is, method one should be used for minor off task behavior, method two for persistance of undesireable behavior, and three when numbers one and two do not improve the teaching-learning situation. Each when used properly and consistantly are very effective means of control and eventual modification of behavior to acceptable standards.

Method I - Ignore misbehavior and praise or reward other behaviors that are acceptable and/or incompatible with the misbehavior.

This method is a more or less neutral consequence to the behavior of the student. It is most useful for minor off task behaviors which occur infrequently and without pattern. The effect is best observed with attention attracting misbehaviors by the student.

Ignoring the behavior the teacher does not give verbal comment, reward or any form of positive or negative reinforcement. The student's stimulis for the teacher is simply not given a response. In definitive terms the stimulus -response principle is not allowed to be completed and thus no form of learning takes place. To reinforce or strengthen the extinguishing of the off task behavior by ignoring it, the teacher may also reward acceptable, on task, behavior. This tends to increase the on task behavior and decrease off task misbehavior. A second response following the ignorance of off task behavior may be to redirect the student to another task or make a demand for appropriate behavior. For example the student is banging his hand on the table when he should be attending to a task of putting a puzzle together. The teacher ignores the banging, directs the student to put the pieces in their correct place. If the student finished the puzzle or at sometime appears to be attending well the teacher rewards the student immediately while the student is attending as he should or when he finished the puzzle. In addition all other appropriate, desired goals are rewarded thus giving the student the opportunity to please the teacher and help learn and behave properly.

Method II - Ignore the misbehavior by giving the student a time-out from your verbal and visual attention for a short period immediately following the misbehavior.

By this method the teacher first ignores the off task misbehavior then removes the student from the environment into a time-out situation. This time-out should be in an environment outside the classroom away from the teacher and other class members and as void of stimulus as possible. A small room in which the student can be placed at these times is most appropriate. The time spent in time-out is short and should have limits placed on it.

If a time-out room is not available the use of a partition is suggested. When nothing else is available the student should be removed from the situation by moving to another part of the room or to another task. The corner of the room works well.

This method, as with method one, can be combined with giving rewards or praise for appropriate behaviors not associated with the misbheavior. This action again serves to strengthen the extinguishment of the inappropriate behavior and reinforce an increase in desired behaviors.

The use of time-out is a more drastic action or consequence and cannot be overused. The first method is by far the one which will be most often used. This second method and the one to follow can and should only be used in extreme cases of off task behavior when the student persists in misbehaving.

Its use must be immediate and consistant. The use of threat in associaton with this method is not advised as this gives the student a positive or negative reinforcement and does not allow the time-out period to work effectively. The time-out period is a quiet time for the student away from the stimuli possibly causing off task behavior. If it is taken by the student or presented by the teacher as punishment it can not serve its true purpose.

Method III- Training session is ended; student returned to classroom.

Being the most drastic method this should be used least of all. Its use comes when the student continues to misbehave and does not adequately respond to the previous methods. The student's classroom teacher must be willing to cooperate in this means of action. If there is no carryover of the consequence into the classroom little or no progress can be made by using this method. A good way to do this is to have the teacher seat the devient student away from the others in the class for the remainder of the therapy period or have an aide or assistant watch the child in an area out of the classroom until his scheduled time is over. By doing this the child receives no reinforcement for continuing devient behavior in the teaching-learning situation of the gym or other area. there is no reward for "getting to go back to class".

Of course it is easy to see that this situation can lead to a loss of control by the teacher or therapist outside of the classroom. The Child can "play one against the other", the teacher against the therapist unless total communication exists between the classroom teacher and the therapist or teacher in the gym or other outside area.

For this method to most effectively work there must be some positive reward or consequences in the classroom and in the gym or outside therapy room. The student must be missing something he likes when he is removed from the outside therapy session. By the Same Token he should not be able to receive positive stimulus or reward for returning to the classroom. If no positive consequences exist in either place the teacher and therapist have much work to do to improve themselves and their respective programs. The lack of positive rewards can also be a factor causing undesirable behavior.

Aspects of the Teaching-Learning Situation

A final area of discussion in relation to behavior modification and control has to do with a few aspects of the teaching-learning situation. These factors are controlled primarily by the teacher and to a slight degree by the environment, but mostly by the teacher. They play an important part in the existance and/or incidence of misbehavior. A few important suggestions in this area will follow.

1) Make the tasks easier or at the student's level to allow more reinforcement for the student. This factor was mentioned earlier in relation to goal setting and motivation. When the student finds that he is unable to perform adequately he will give up and start to misbehave.

2) Reinforce more often. If the student begins to lose interest it is often because he is unhappy with what he is doing. When he is reinforced the student will continue to maintain interest in the task and does not have time to be devient.

3) Decrease outside interference which may result in misbehavior. The student must be able to attend satisfactorily to the task if he is to succeed. When outside disturbances keep him from his task he is more likely to misbehave. A quiet room and closed door are most satisfactory. However any room can be made to block out most adverse stimuli when necessary.

4) Make sure the student is comfortable physically. The student should be allowed to visit the bathroom when necessary before coming to class or session. The room temperature and the student's dress should be appropriate and comfortable. Allow the student to sit if a long period of standing or waiting is anticipated. No matter how low the student's functioning level he or she is usually able to show dissatisfaction with the environment. Attempt to read these signs and react as best as possible.

A warning should be given here. Do not allow the student to manipulate you, the teacher. Be sure that you know the student and take nothing for granted. Do not be afraid to find out from someone who knows if the student is "faking" or not. The information will ultimately benefit you and the student.

The preceeding informational discussion on behavior modification has been taken from experience, reading and research. The authors and books used will be noted in the bibliography or have been when quotes are used. Special recognition will be given here for organizational aid and suggestions to a paper by Hugh McBride, Michigan State University and Fred Chappel, entitled A Supplementary Manual For the Training of The Severely Mentally Retarded, with direct aid taken from the section - A Modified Language Aquisition Program For Use By Attendents and Attendent-Supervised Retarded Trainer-Student Pairs by Martha S. Roland, Michigan State University.

Terms and Definitions

1) Reinforcer - An object, event or gesture of reward in response to a stimulus. It can be either positive or negative. The use of a reinforcer will tend to increase the number of responses by the student to that reinforcer over a period of time.

2) Reinforcement - The act of giving a reinforcer to a student following the student's response.

3) Response - An observable behavior, usually directly related to some stimulis.

4) Continous Reinforcement - A reinforcer is presented following every desired response. The response may be wholly or partially correct. Best used when initiating a new response.

5) Intermittant Reinforcement - The presentation of a reinforcer at evenly spaced or random intervals of time or response. The student is not rewarded each time the correct response is given but every 2-3 times. This works best to make the response stronger when it is already learned.

6) Shaping - The use of reinforcers given for approximating skills or parts of a skill so that the entire skill may be developed into a whole. The method is much like the whole-part method presented in a previous section. The teacher demonstrates the entire skill, then asks the student to initiate that skill. Rewards are given for the correct response which are parts of the total skill or approximations of the skill.

For shaping to work properly the teacher must continue to expect the student to perform more and more parts of the skill adequately. Reinforcement is always continuous.

7) Prompting - Assistance given the student so that he may more easily elicit the proper response. Prompting may either be physical or vocal.

Physical prompting is stimulating a movement by touching, poking, or manipulating a body part or parts. This does include putting the student through the movement.

A teacher vocally prompts when he or she gives directions or cues relating to the skill.

8) Fading - The gradual process of giving lesser amounts of assistance or stimulis to elicit a desired response. This method is described in a earlier section.

9) Time-out An extinction or mild punishment method which removes the student from positive reinforcers to a place having no positive reinforcers. Time-out is a consequence for undesireable behavior. The consequence may range from the teacher turning his or her head away for a few seconds to removing the student to another room for a period of time.

10) Extinction - The process of eliminating undesired behaviors.

The following are terms for other means of modification and control, especially useful in one-to-one behavior-consequence relationships between student and teacher.

11) Value Law - An established rule pre-set by the teacher and understood by the student. Examples are "no gum chewing in class", walk on the right side", "no running on the pool deck", etc.

12) Criticism - Demeaning - This is the use of psychological degraduation to call the student to task. Ex. - "I know you think that might be funny but to me it is very childish". For the population of mentally retarded individuals with which this program is concerned a method such as this should be used wisely. Its use with a devient student is workable but should not promote any permanent feelings of lowered self esteem. Its best effect is in showing the student that his behavior is not appropriate and should be changed. The teacher should always follow this method with some form of directional change and/or a positive self-confidence reward.

13) Negative consequence - Stating or implying a form of punishment if the misbehavior is continued. This is a threat and should not be used lightly. Once it is made and the negative behavior does not cease the threat should be carried out. Negative consequence quickly becomes ineffective when idle threats are made and not followed by the consequence.

14) Punishment - The act or action of applying negative consequence. Punishment is the negative reward for an unacceptable behavior.

15) Interpretive - The teacher expresses reasons, implied or actual, for the misbheavior. Asking questions or making questioning statements is an attempt to discover the reasons for misbehavior is considered an interpretive control technique. It is possible that by this method the teacher can find out much about the student and help relieve tensions inside or outside the classroom which may cause unwanted behaviors.

16) Empathetic -Sympathetic - May follow interpretive or used in combination with interpretive. The teacher shows understanding for the causal factors behind devient behavior.

17) Positive Consequence - The opposite of negative consequence it is a positive reward for a behavior. As with negative consequence, the positiveness of the reward depends upon the student. The positive reward must be an acceptable reward as far as the desired behavior is concerned.

The student may receive a reward of the teacher's attention for misbehavior or a piece of candy for an acceptable behavior. One is more acceptable to learning than the other.

18) Conditioned Stimulus - Much like a value law, a conditioned stiumulu is a set condition between student and teacher. The stimulus can be a look, a gesture, or a word from the teacher which is either a positive or negative reward for the student.

19) Redirection - Changing the environment and/or the task of the student is a form of redirection. Redirection is asking, demanding or otherwise changing the student's task or behavior direction. The teacher directs the student's attention to the task or to something else in order to stop an inappropriate behavior.

20) Demand - The use of a commanding statement to cease or change unwarranted behavior. The teacher demands that behavior be stopped or redirected, Ex. " stop hitting and return to your chair."

21) Probing - A means of attempting to discover the reasons or causes of misbehavior. The teacher questions the student to make him or her think of why the behavior is occuring. This method is effective for the teacher and the student because both may discover reasons for behavior problems and maybe do something positive about it. Probing can be used along with interpretive or empathetic-sympathetic.

22) Humor - The use of a humorous joke, gesture or action to control a behavior. The teacher must be careful to use humor which is tasteful and not overly sarcastic, especially to the student. Humor can be used in almost any circumstance to relieve the tension of the environment and set the stage for control and correction procedures.

Extreme care must be taken with a mentally retarded or multiply handicapped student so as not to make inappropriate humor concerning the handicaps. Light jokes can be made of limitations if there is no inference of criticising or demeaning the student, and the student is able to understand and accept the humor.

Behavior modification is a disciplining control technique designed to promote all forms of learning and make the overall behavior of the student more acceptable. Its use by teachers requires prior knowledge, understanding and commitment to behavior modification techniques. The initial use of behavior modification requires goal setting for behaviors to be reached and a program for reaching these behaviors. As with all control and discipline methods behavior modification methods must be designed for the student and used consistantly by the teacher. By using observable, operant behavior the teacher need only respond to the behavior he or she observes. There is no need to look behind the behavior and into the background of the student. For these reasons and others given earlier behavior modification is probably the most effective means of control and discipline which can be used in the field of education. Its effective use in this Physical Education Program will be considered of prime importance to the success of the program.

PROCEDURES

PROGRAM PROCEDURES

The Responsibilities of the Physical Education Director

The initiation and continual progression of the program and its results are the ultimate concern and responsibility of the Physical Education Director. The planning of activities, and evaluation of progress will rest with this person. On a weekly basis, at least a week in advance, a lesson plan for the class will be given to the teacher. This plan will outline the activities for that week's gym period. Specific objectives, as far as content area, equipment needed (if any) and in-class procedures will be given. It is both recommended and expected that the teacher will see that this plan is followed.

The actual program, itself, is based on the activities within it. Each teacher will have a copy of at least the activities section readily available and be familiar with it. These activities will be listed by name and page number on the plan.

As far as evaluation is concerned the Physical Education Director must maintain an on-paper grasp of this area. That is, the responsiblity lies soley with this person but must be a total staff effort to keep in contact with each other and communicate in the area of student progress and difficulties. It will be up to the Physical Education Director to see that these lines are opened and kept alive.

At no time will the teachers or other staff of this agency be called upon to take any of these responsibilities falling to the Physical Education Director. However, as part of the responsibility to provide the best of programming for our students, the Physical Education Director may take over the class operation. It is hoped that this will not be necessary in the interest of the total program of all the students of this agency

Responsibilities of Teachers

A teacher will be considered the actual classroom teacher or designated staff aid in charge of the class. This may be an aid given the responsibility for the physical activity of the class as part of his or her duties. This aid may also be temporarily charged with the responsibility of the class during the gym period or the day. In any case, at least one, if not more than one, staff person, familiar with the physical education program and the class or classes in the gym, must be responsible for these students while in the gym. This person is responsible to see that the class runs smoothly and as designed in the lesson plan. Although another person, teacher, aid, or volunteer, may take charge of an activity, it is suggested that one teacher or designated aid take charge of the total class operation while in the gym so as to keep a continuity of activity and progression.

It must be realized that the teacher and others working directly with the students are the best source of information concerning the advancements and other changes made by individual students. For this reason the teachers will be asked to inform the Physical Education Director in writing or otherwise of significant changes made by any student. This may be a short note concerning a change in attitude, progress in a skill or exercise, or other changes affecting the student's physical or motor development.

This is considered a most important factor of the teachers' responsibility and most necessary to the effective functioning of the program. Communication should not be limited to the student's changes. Any and all problems related to the program and its progression should be communicated to the Physical Education Director. This includes problems of time, equipment and special needs of students, and teachers involved with the program. All assistance and cooperation is solicited and will be appreciated.

This communication aspect is one part of the teachers' evaluation responsibility. The other part is the actual testing, scoring, and administration of the motor development test. This will be an annual test administration under the direction of the Physical Education Director. Recording and data analysis of the test will be done by the Physical Education Director. When this is completed the results of the class and its individuals will be made available to the teachers and other interested staff. This information should be available before the end of the school year. Objectives will be made for the coming school year.

Volunteer Responsibilities

Volunteers are an invaluable resource to our overall program here at Logan. For this physical education program they will be a necessary part of the class procedure. Their part is played in the actual work of the students in the class with the games and activities. These persons must be aware of the game play and rules and the objectives to come from the game. More than the teacher or class leader their interests and enthusiasm are most important to the enjoyment of the students and the success of the program.

The volunteers work under the direction of the teacher and must be responsible both to the teacher directly and indirectly to the Physcial Education Director. Acting as a model for correct and appropriate play and social interaction, the volunteer is a most important link in the chain necessary for achieving many of the goals of this program.

In a sence the volunteer is a teacher; one who is able to take time to do the individual work sometimes necessary, helping the teacher, and teaching the student on a level which is necessary in helping the student to learn and enjoy the class.

Class Procedures

The lesson plan will give, for the most part, the step-by-step procedures of the class period. The class will begin following a 15 minute time allowance for dressing. The first activity of class will begin following this time, even though some students may not be as yet dressed. Begin with the students that are there and work for the goal of all dressed at the beginning of class. The exercise period should be at least another 15 minutes. Three or four exercises will be given to do during this time. Attempt to do all of these if at all possible. If not stick to the time alottment.

The next 15 or 20 minutes is the activity period. This begins with the game explanation and set up. One or two games will be selected for play during a week. Play one game for each class period, the other is to act as a back up when interest fades or when there is time left over. Take what time is necessary for explanation and teaching as long as this does not overly interfere with class members play and enjoyment.

The last time period is for dressing and showering. This time should be coordinated along with the swimming schedule so that post- class dressing and showering are before the swimming class.

Although the students are actually the most important factor of this program, the one-hour time schedule must be closely followed. This is then a goal to get the students to comply with the schedule and not attempt to conform the schedule with the students. It must be understood that this will take time and patience on the part of the teacher, aids, and volunteers.

ACTIVITIES

ACTIVITIES

Within this section is the heart of the physical education program. More than the theory of teaching methods of goal development and of student needs the actual working structure of the program is what makes for success or failure. In order for this program to work the theory and ideals of games and activities must be understood by the teacher. Activities, games, sports, need little to no understanding by the student to be used with success. The participation by the student in activities is the focal point of learning for this program and the best use of these activities. The choice of games and activities for a class session determines the objective outcome of their use, as well as the initial and continuing direction by the teacher. For it is the understanding of games and their use for the teacher which ultimately directs successful or unsuccessful completion of objectives by the students.

GAMES TEACH

Games provide the opportunity for students to learn new skills in a number of areas of development not wholly in physical education. That is they are not strictly limited to physical skills. Although new movement skills may be learned by partipating in games and activities, an essential prerequisite to participation is the presence in the student of a basic level of physical-motor skills. In special physical education games are not only a learning tool but an eventual form of normalizing recreational pursuits in adult life. This twofold purpose for games utility must be kept in mind while being used as part of a class session.

People basically learn when a stimulus is introduced which makes it easier to accept learning material. The stimulus and the learning practice are made stronger or weaker by responses, either internal or external, in the form of positive or negative rewards. The former statement is a general definition of a stimulus-response theory of learning. Of course this theory is more complicated and includes more factors than those given. But for our purposes this description will suffice.

Games are a unique form of stimulus which allow for the inclusion of a wide range of learning factors. The stimuli come from many sources and responses very greatly. Rewards, both positive and negative, are many and may be found in a good performance, congratulations from a teammate, winning a race, losing a race, striking out, or working with the team in a winning or losing effort.

In the strict physical education sense, games are a way to use and practice learned physical skills. For the needs of this program games will be also used to teach new skills as well as practice and improve already learned physcial skills. The teaching of skills in games is a matter of presentation and direction. Direction and aid by teachers, volunteers, and other aides on an individual and/or small group basis is required.

The students must receive the stimuli which the game provides. It is up to the directing teacher to highlight stimuli in the initial directions and for all volunteers, teachers and aides to help the student receive the stimuli as they occur within the game situation. This may require removing the student from the game situation for special instructions or stopping the game to point out something to the class. Remember that stopping the game or removing the student is not always an effective method. The use of the game and the natural occurances within its play environment should be allowed to provide stimuli as it may without interference by the teacher. The teacher, aides and volunteers must become aware of the stimuli inherient in the games and learn to recognize them as they occur, allowing them to provide their stimuli as they will.

Included in this program are activities in the areas of locomotion, manipulation, lead-up games, and relays. Exercises for the areas of strength, endurance, flexibility, and agility will also be included. These activities and games are adapted for the most successful use by the students served by this program. A special section will be devoted to wheelchair exercises. Their use in the gym class will be included within the individual activities.

LOCOMOTION ACTIVITIES

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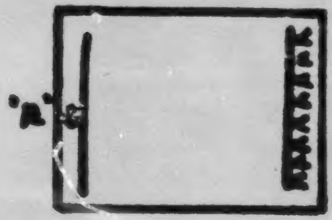


RED LIGHT

Equipment- None
Formation- Two files forty feet or more apart

Objectives-Leg development, agility-stop and start, balance, directionality, following directions, perception of movement, goal identification and pursuit

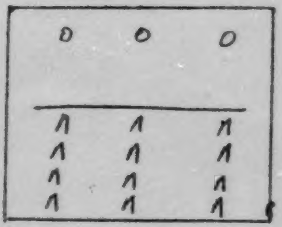
Directions for Play- All players line up on the line. The object of the game is to reach the goal line safely. One player is chosen as "it". "It" stands on a line opposite the other players with his back to them. "It" calls out "Green Light" so that all others may hear. At this time the other players may move, and progress to the line on which "it" stands, the goal.

When "it" calls out "Red Light" all players must stop. "It" quickly turns around to face the others. Those named or pointed out by "it" as still moving, must join "it" on the line with their backs to the other players. "It" then turns his back to the others and calls out "Green Light". When "Red Light" is called out "it" and those named as "it" quickly turn to face the other players. All those players with "it" then name or point out the players caught moving. Players caught moving join the "it" line and the game continues until one player remains without being caught. This player then becomes "it" and a new game begins.

Comments: In order to maintain interest in this game and all others stop play when interest is at a peak and move on to other games or activities. This will assure a carryover of enthusiasm for another time.

Movement will be described as a step or continued movement in the direction of the goal. Movement of the head, arms or upper torso shall not be considered excess movement. Special adaptions to this rule can be freely made to suit the situation where it aids the students' participation. The teacher, volunteers, or aides may help students as necessary for participation. Wheelchair students may participate on their own or with help.

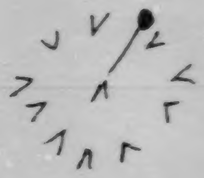
NIMBLE JACKS



Equipment- Bowling pins, Indian clubs or marker cones -one for each team
Formation- Files of four or more -five to ten feet from the pins
Objectives- Leg development, agility, balance, directionality, jumping, run and jump, depth perception, group participation - team work.

Directions for Play- The first player runs to the pin and jumps or steps over the pin. If it is knocked over, the player must replace it and start again. The first player stops, turns, picks up the pin and returns to the line, handing the pin to the next player. This player then takes the pin to its place and returns to the rear of the line. The next player then runs to the pin and jumps or steps over, carries the pin to the following player who returns the pin to its place. The game continues until each player has alternately jumped over and returned the pin. The game may continue beyond this point for one or two more rounds if interest persists.

Comments: This is not a relay race. It is a game to develop and practice the stated objectives. This game may be termed a lead up game for a similar relay. At some time Nimble Jacks may be used as a relay as it will serve as an adequate relay of a higher level. The skills involved must be well developed by the majority of the students in order to use as a relay race. Make adaptions as necessary to allow maximum participation. Wheelchair students may participate with or without help.



JUMP THE SHOT

Equipment- About eight to ten feet of light weight rope, beanbag or knotted towel

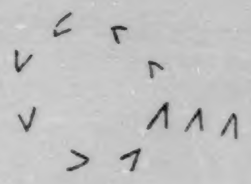
Formation- Single circle all facing in: may be done in small group, circles of six to eight or as a large total group. The large group would require a longer rope.

Objectives- Arm, shoulder, and leg development, agility, balance, temporal projection, jumping, spatial awareness

Directions for Play- One player is chosen to swing the rope (the teacher or volunteer may swing the rope if necessary). The beanbag must remain on the floor while in motion. The player swings the rope in a circle maintaining sufficient length to reach the players standing in the circle. The circle players jump to avoid being hit by the beanbag. The rope must be moved at such a speed so as to allow each player time to react to its movement. For this reason it may be necessary to group according to ability level.

Comments: Be sure the players maintain circle formation within reach of the beanbag. A player in a wheelchair may participate by moving away from the beanbag as it passes then return to the circle, moving back each time the beanbag passes.

Make a competitive game of this by having each player unable to avoid the beanbag leave the circle. This player may return to the circle when another player is hit. A rotation may be set up whereby the first player hit steps out and when the second player is hit the first player becomes the swinger and the swinger takes the place in the circle.



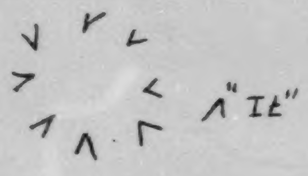
COME ALONG

Equipment- None
Formation- Single circle, facing counter-clockwise
Objectives- Leg development, agility, directionality, recognition of a home base, group interaction

Directions for Play- One player is chosen to start the game. This player runs or walks around the outside of the circle. Taking another player by the hand, she says, "Come Along". These two players continue around the circle and may pick up one or two more players. The player closer to the circle selects the others who "Come Along".

The teacher or other leader (this may be one of the students) calls "Go Home". The players drop hands and return to their places. The last one to reach his home position will begin a new game. Each student should have a chance to begin a game and be selected to "Come Along".

Comments: If a student has difficulty remembering his home position, someone may stand in that place acting as a reminder. Those remaining in the circle should maintain the position until they are selected to "Come Along". Point out to all players the other players who are standing on either side of them in the circle to give a more definite point of reference. Marks on the floor may also be used as reference points. Remember this is a teaching game and the activity of the game is a secondary objective.

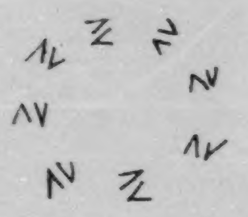


DROP THE BEANBAG

Equipment- Beanbag
Formation- Single circle, facing in, hands joined, one player outside the circle
Objectives- Leg development, agility, directionality, simple chasing and fleeing, attention span development, visual and ocular control

Directions for Play- The player on the outside of the circle carries a beanbag, running or walking. He drops the bag behind a player who must pick up the bag and chase the player who dropped it. The chasing player attempts to reach the vacant space first or tag the other player before he reaches it. If this player is successful, he remains in his home place. If not he begins another round of the game. A variation may be added by allowing the first player to go around the circle or through at any point as she pleases. The players in the circle must raise their hands to allow both players to pass through. The chaser must follow the path of the one who dropped the bag unless she passes him. At that point, she may take any path desired to return to her home position.

Comments: Encourage everyone to participate and see that each player has a chance to drop the bag. All players should remain facing towards the middle of the circle until the runner with the beanbag passes him.



MY FRIEND

Equipment- None
Formation- Double circle, one circle facing clockwise, the other facing counter-clockwise, partners
Objectives- Leg development, agility, directionality, group interaction, maintenance of an object or point in memory

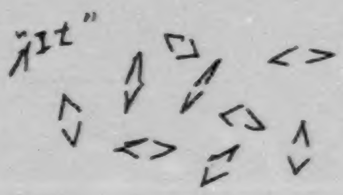
Directions for Play- On a signal from the leader (teacher or student) the players in the inside line walk forward. On the second signal they stop and return to their partners, grasp hands and squat or sit as quickly as possible. The leader then gives the signal and the outside line moves forward. On the second signal the players stop and quickly return to their respective partners.

A variation may be used which calls for both lines to move on the first signal. On the second signal, those on the inside run to find their partners, and sit or squat with them. This can also be done with the outside circle running to find their partners. In either case the line not running must come to a complete stop on the signal. Caution all players to dodge and avoid others while finding their partners. Members of each circle may also change places periodically.

Comments: It would be best for activity and safety's sake to make circles large and allow space for movement. This game can also be played in small groups of three to four partners. More individualized attention may be allowed for teaching and learning purposes with small groups.

The variations are graded according to their relative difficulty. One variation should not be initiated until the more simpler one has been well developed.

Points can be given and the winning couple or couples can be declared. One point is scored against the last couple to join hands and squat. Scores can be given for the game with the base game or any variation.



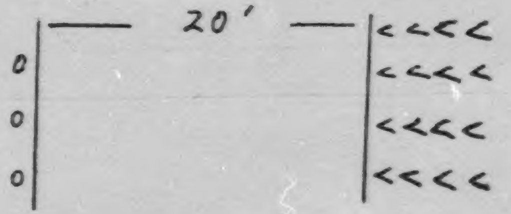
BACK TO BACK

Equipment- None
Formation- Scatter, partners, back to back, elbows or hands linked.
Objectives- Leg development, agility, body image, directionality, partner play

Directions for Play- The one player without a partner is designated as "it". The other players move about with hands held or elbows linked. A teacher or student acts as leader. At the command "change", given by the leader, each player must seek a new partner. The player left without a partner is designated "it", and a new game starts with the command "change".

A little more activity may be added if three, four or five players are chosen as "it" and the playing space is enlarged. In this case, the last one or two couples to join and the player without a partner would be "it". Another variation of this is partner tag, which is described along with the tag game.

Comments: This game will hold interest as long as activity is continued and kept at a good pace. The leader is responsible for the tempo of the game. As soon as an "it" is determined, begin another round. As with all other games, cease activity and move on to another game or activity when interest and enthusiam are highest.



ONE LESS

Equipment- Two to four tennis balls or playground balls, bowling pins
Formation- Files behind one line, two lines on the floor, 20 feet apart
Objectives- Trunk and leg development, agility, directionality, object manipulation, group interaction, team play

Directions for Play- The class is divided into teams of four to six players. Each team player is given a number or other similar designation. The objects are scattered on the line opposite the team files. Objects number one less than the number of teams. The leader calls out a number; for example "2's". All players designated as "2" run to the opposite line to secure an object. Points are awarded to the teams who secure an object. The games may continue for a period of time or until one team reaches a given score total.

Comments: This is a game where an individual is performing as a player for his team. The team's total performance is dependent upon the performance of each member. Each team and team member should be made aware of this important objective of this game. Encourage participation of all.

This team participation game may well be a new concept for the students. The presentation of this game and others to come like it will require much teaching effort. Games in and of themselves do not teach. Much prompting and other forms of stimulation may be necessary to elicit learning objectives.

Let it be understood that when the game and its assiciated skills are learned, its play is enjoyable and satisfying. Even though learning and teaching may be difficult, the eventual outcomes may be very well worth the effort.

TAG (and variations)

Equipment- None (except where noted)
Formation- Scattered, within boundaries unless otherwise specified.
Objectives- Arm, shoulder, trunk and leg development, agility, body image, balance, directionality, giving and receiving of tag-touch, group participation, self concept, self-awareness

Directions for Play One player is chosen as "it" to start the game. Designate boundaries and limits of play. "It" attempts to tag other players. Another player when tagged becomes "it". The player who has been tagged, calls out "I'm it".

The variations will be given below. For the most part, these provide for positions of safety for the runner. A player in a safety position may not be tagged. Within the limits of a class period, a number of variations may be used in order to hold interest and provide a number of movement and skill experiences.

Squat Tag- The runner is safe when assuming a squatting position. A runner standing and bending at the waist will also be considered safe.

Supper Squat Tag- The number of squats by a runner is limited. For example, a runner may only be allowed to squat twice safely. Following this, that runner has no position of safety until she has been "it". The leader or player who is "it" may indicate how many safeties will be allowed.

Ankle Tag- The player becomes safe by holding his ankles or knees. This may be with one or two hands.

Nose and Hip Tag- The runner becomes safe when he places one hand on hip and one hand on his nose. In the event that the runner does not touch both parts simultaneously and is tagged, he becomes "it". Other pairs of body parts may be used to vary the game or to adapt the game to any handicaps (head-stomach, arm-side, nose-toe, elbows).

Spot Tag- The player who is tagged must place her hand on the place where she was tagged. If tagged on the back she would place a hand on the back and try to tag someone else. When she tags another player she no longer needs to touch the spot originally tagged.

Eraser Tag- An eraser or other object easily held while running is used. One player is selected runner and one player is selected as "it". The runner is given the object to hold. "It" chases the runner, who may give the object to any other player, who then becomes the runner. No one may refuse to take the object. When the runner is tagged, he gives the object to another player who becomes the runner. The runner is then given a fair chance to get started.

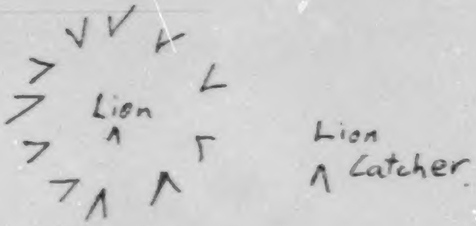
Topper Tag- To begin the game, one player is designated as "it". "It" places his hand on his head and tries to tag another player. When tagged, the player places his hand on his head and helps "it" tag other players. The game continues until all players have been tagged. The last player tagged becomes "it" to start a new game.

Statue Tag- One player is selected to be "it". She tries to tag the other players. When the player is tagged, he must immediately stop and maintain a standing position. This position must be held until another player, not "it" touches him or the game ends. The game ends when all runners are standing. The last runner tagged becomes "it". To simplify the game, more than one player may be selected as "it".

Partner Tag- A player is selected chaser; another player is selected "runner". All other players must have a partner. Partners link elbows. The chaser chases the runner attempting to tag the runner. The runner is safe when he links elbows with a player. That player's partner then becomes the runner and is chased. When a runner is tagged, she becomes chaser and the chaser becomes runner.

Comments: Tag and its variations are very active games which can be played indoors or out, with or without designated boundaries, on an individual, partner, or team basis. There are many other forms of tag to be found. These games are a sample of some more simple forms. The environment or objects in the environment are good things to use to invent new variations. Specific learning objectives may be incorporated into basic tag to present new experiences.

Basic social interaction concepts are learned by playing tag. The players must learn to tag-touch lightly and not push, shove, or grab unnecessarily. Rules of the game and safety rules for all must be followed by players in order for the game to proceed successfully. Caution players against tagging on the head or lower legs.

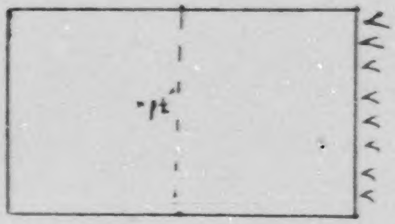


LION CATCHER

Equipment- None
Formation- Single circle facing in; hands joined
Objectives- Leg development, agility, directionality, chasing and fleeing, group interaction

Directions for Play- A player is selected as "lion, another is chosen as "lion chaser". "Lion" stands in the center of the circle, the "lion chaser" stands outside the circle. The "lion chaser" says, "I am looking for a lion to catch". The "lion" replys defiantly, "I am the lion and you can't catch me." The "lion chaser" chases the lion in, out, around, and through the circle. The players in the circle raise their held hands to allow the "lion" and "lion chaser" to pass through. When the "lion" is caught, she becomes the "lion chaser" and a new "lion" is chosen. If the "lion chaser" is unable to catch the "lion", these two may change roles or two new players may be selected.

Comments: Chasing and fleeing games are usually fun and provide an early form of competition for the players. Although participation by all is the most important objective, the introduction of competition as a form of social interaction is also necessary. In essence, there will be a winner and a loser, but the concept of this games does not allow for this labeling. Do not point out the event of success or failure. The players are aware of who was caught and who did the catching. Teacher need only keep the game moving and exciting for the players. Point out acceptable maneuvers of chasing or fleeing made by a player. Congratulate all players on their efforts at participation and let the game experience provide the teaching.



DILL HILL

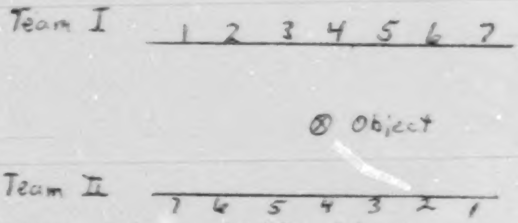
Equipment- None
Formation- Two lines 20 feet apart
Objectives- Leg development, agility, directionality, self image

Directions for Play- One player is designated as "it". "It" stands on a line half-way between the two boundary lines. The player who is "it" calls out, "Come over the hill!"; on this signal all players run to the opposite boundary line. "It" tries to tag as many of the runners as possible. Those players who are tagged go to the center and help tag the others. "It" continues the game by calling the signal each time until all players are tagged. The last player tagged is "it" to start the new game.

Comments: This game could be called another variation of the tag games. The game may be played inside or outside. In some respects Dill Hill is more simpler than tag. Dill Hill provides boundaries in which to play and has fewer restrictions on play. All may participate throughout the game without having to drop out when tagged. A lot of just plain activity and vigorous movement is possible with this game.

Dill Hill is recommended for use along with the introduction of simple tag to further introduce tagging games, and use and practice the technique of tagging, chasing and fleeing.

STEAL THE BACON



Equipment- One Indian club, bowling pin or other suitable object
Formation- Two lines 20 feet apart, one team on each line
Objectives- Leg development, agility, directionality, object manipulation-reach and grasp, naming concepts, memory reference, group interaction-team play

Directions for Play- Divide partners into two teams and assign a number to each team player. Each player on a team should have a number corresponding to a player on the other team. The leader calls out a number. The players from each team with that number run to the center. Each attempts to snatch the object and return with it to his team without being tagged. Many forms of maneuvers or false moves may be used to put the other player off guard in order to snatch the object safely. Pushing or shoving is not allowed. When one player succeeds in returning the object to his team, that team is awarded a point and the object is replaced in the center. When a player tags her opponent before he reaches his team with the object, that team is awarded a point. The team with the highest score wins the game. A time limit or a winning score may be set.

Comments: This game provides the opportunity to introduce movement strategies into a game situation. A different and more direct form of competition is also present. It will be best to play down this competition to begin with. Allow the players to simply run to the center and return with the object. The false moves of competition may come on as the players find that they cannot simply grab the object and run.

Use volunteers or aids as players in this game as well as any of the other games. These persons provide a good example to follow for the other players. Be sure that they are briefed on the skills and objectives of the game and methods by which to elicit learning.

RED ROVER

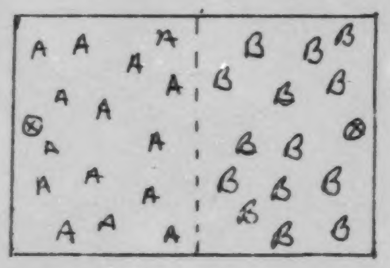
Equipment- None
Formation- Two lines, 15 to 20 feet apart, players holding hands
Objectives- Leg development, agility, body control, group interaction, team cooperation, activity.

Directions for Play- Form two lines of an equal number of players. All players should be holding hands. A leader is chosen from each team.

The leader from one team calls out, "Red Rover, Red Rover, send ____(name of player on the other team) over." The player named runs to the opposite line and attempts to charge through the line. If this player fails he remains with that team. If he breaks through the line he returns to his team. The game then continues with the leader of the other team making the call. Each team takes turns calling the player over for the period allotted. The team with the most players at the end of time is declared winner.

Comments: A variation which would speed up the ending is to allow the player who breaks through the holding line to bring back a player from that team to his own line.

Watch that each player on both teams get a chance to be called over. Do not allow a player to needlessly hit or strike another player. As with tag games, the players need to learn how to give and receive pushing, shoving and striking which is part of the game. Be sure players break through between two players and do not attempt to run over a smaller or weaker player.



CAPTURE THE FLAG

Equipment- Two Indian clubs, bowling pins or flags
Formation- Two teams each on their own half of a field or play area
Objectives- Leg development, agility, cardio-vascular efficiency, directionality, object manipulation, team play

Directions for Play- The object of the game is to steal the other team's flag and return with it to your side withought being caught.

Choose two teams and describe the boundaries of their area. Each team appoints a player to guard the flag. This guard should not be closer than 3 feet from the flag. The other players are scattered within their area. Any player may move in or out of the opponents territory but is liabled to being tagged and taken prisoner if caught by an opponent in his territory. A member of team "A" tagged by a "B" player in "B's" territory is considered prisoner and is taken to an area designated as a jail. Guards should also be appointed to watch the prisioners.

A prisoner may be freed by one of his teammates when they clasp hands and cross over into their team's territory. The prisoner may not leave the jail under any other circumstances. The two team-mates are temporarily safe from being tagged while their hands are clasped. These players cannot carry the flag with them.

The team to successfully return to its side with the opponents flag is the winner.

Comments: This game requires a great deal of team strategy in order to be played successfully. All players must be aware of the concept and functioning of team play. Presentation of the game is time consuming as is the actual play. There is a great deal of activity possible in many areas, happening continuously and simultaneously. Organization of presentation and play is most important. The outcomes in enjoyment itself is well worth the input of work.

Players having difficulty with play may be aided at any point. Aids and volunteers can be appointed as team members or neutral observers. Some definate distinguishing marks (hats, vests, badges, etc.) should be used to differenciate teams and observers.

Although the gym is a good area in which to play, it is highly recommended that a large outside field or other large area be used. An acceptable area size would approximate one or two football fields. A large wooded area is also acceptable, and adds a degree of realism and excitement to the game. For the convenience of wheelchairs, a large parking lot may be used if possible.

MANIPULATION ACTIVITIES

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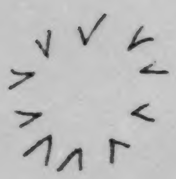
RING TOSS

Equipment- Deck Tennis Ring or other hand rubber ring, beanbag
Formation- Circle facing in
Objectives- Arm and shoulder development, directionality, throwing and catching skills, social group interaction

Directions for Play- Players toss the ring to anyone in the circle excepting the the players on either side of them. The ring must be thrown accurately and so that it can be easily caught. A player not catching the ring must sit down. If the thrower does not throw the ring so that it is easily caught, he must sit down. The last two players standing win the game and will start a new game.

Comments: If players have extreme difficulty with throwing and catching the ring, a beanbag or ball may be used. If a ball is used, it must be bounced when thrown. For the ring, an underhand toss is best to use. Keep the circle small enough so that players can toss the object easily. Try to include all players in the game.

A variation may be used which calls for players to keep track of their misses or errors. The players with the least number at the end of the game wins.



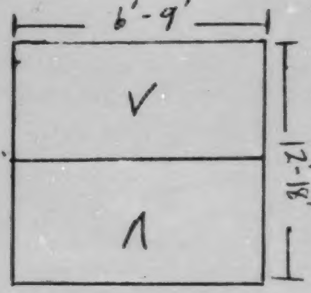
POISON BEANBAG

Equipment- Four beanbags
Formation- Circle facing in
Objectives- Arm and shoulder development, laterality, directionality, grasp and release skills, group interaction

Directions for Play- A leader is selected who will start the game and direct progress of the game. The person may or may not be a player. Starting with the leader or other designated player, the beanbags are handed (not thrown) from player to player to the left or right as directed by the leader. When a signal is given all players holding the beanbag are "Poisoned" and must leave the circle. The number of beanbags used is relative to the number of players in the circle and should decrease as the game continues and the number of players diminish. The last two or three players should be exchanging one beanbag and are declared the winners.

Comments: If small circles of 6 to 8 players are used, only two beanbags should be used with two players finally declared winners. Large circles of ten or more should use four beanbags. The use of more beanbags will speed up the end of the game because more will be caught with beanbags. This may be desirable in order to maintain interest and allow more to participate.

A timer or clock may be used to signal time and make a more objective signal. This would also allow the time to be varied.



TWO SQUARES

Equipment- Playing court, playground ball
Formation- Two players, each in his own half of the court
Objectives- Arm and shoulder development, directionality, striking an object, control and object direction, movement in relation to a moving object, self-image development

Directions for Play- The object of the game is to hit the ball fairly to the opponents so that it cannot be returned. The player in the service court begins a game with a serve to her opponent. The serve must be made so that it can be easily returned. Other volleys need only be made without violation. The ball is passed back and forth between players until a violation occurs. The player making the violation, leaves the game, the player remaining is server and a new opponent enters the game court. The server may only serve five times in succession. After this two new players enter the game and one is designated as server.

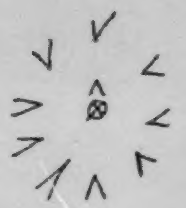
Serve- The ball is bounced and struck or carried so that it enters the opponents court where it must bounce once before being returned. It must also be easily returned by the opponent.

Service Court- The square occupied by the server or winner of the game.

Volley- Passing the ball from court to court between players.

Violations-
A. Failure to bat the ball
B. Causing the ball to strike a line or outside the playing court
C. Allowing the ball to bounce more than once in a players own square

Comments: This is a low organization game with a low competitive level. It can hold the interest of students for a long period of time. Be sure that all students are able to participate. The ball may be batted or carried. A student unable to adequately participate by batting the ball may carry the ball across or toss the ball. Teach the batting-striking-skill, but allowing tossing when necessary.



GUARD THE CASTLE

Equipment- Playground ball and bowling pin or other standing object
Formation- Circle facing in
Objectives- Arm and shoulder development, agility, directionality, dodging, sliding, throwing, trapping, catching, kicking, team work

Directions for Play- The object (Castle) is placed in the center of the circle. A player is chosen to guard the castle. This person is to attempt to keep the object from being knocked over by the ball. The guard must place himself in front of the castle, between the castle and the circle player or players with the ball. This position must be maintained in order for the guard to protect his castle.

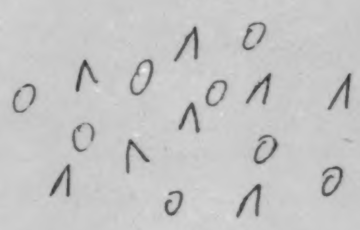
The players in the circle attempt to knock over the castle. The game starts when the ball is handed to a player in the circle. This player may either throw the ball at the castle or pass it to another player. The game continues like this until the object is knocked over. If the guard knocks down the object, a new guard is selected. Otherwise the player knocking down the object is the new guard. Play should not continue more than one minute with one guard.

Comments: This game is a good opportunity to introduce a low level of team work. The players in the circle need to work together in order to help maneuver the guard out of his protecting position. Encourage the players to pass the ball across the circle and from one player to another to keep the guard moving and "off guard".

For the guard, this game allows not only some practice in locomotor skills, but also a chance for a player to learn and develop a self-image. It is a situation of self-testing where the individual must perform up to his own ability and the expectations of the rest of the players. In a sence the guard must beat the players in the circle.

Use a good deal of individual praise and personal recognition for a good guarding job. Provide motivation and encouragement for all players when they are guard. The difficulty of a new situation and the performance at guard needs to be recognized and dealt with appropriately by the teachers and other class leaders. If necessary the skills of guard and circle (team) player may be practiced separately to make these more easily used in the game.

Make the game more difficult by using two or three balls or two or three pins. These will add to the excitement but can be added only when the group skill level reaches a point where it can be successfully administered.



KEEP AWAY

Equipment- Any kind of ball, beanbag or deck tennis ring
Formation- Scatter, two teams
Objectives- Arm, shoulder and leg development, agility, directionality, running jumping, dodging, throwing and catching, simple team play

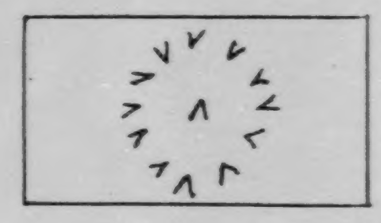
Directions for Play- Divide the group into teams and issue one team colored vests to wear. Designate the area of play and scatter teams. Begin the game by giving the ball to a player of the team with vests on.

One team attempts to maintain position of the ball while passing the ball among themselves. The other team attempts to intercept the ball or tag a player of the opposite team when that player has the ball. When a player is tagged with the ball in his possession, the ball is given to the other team. A team intercepting the ball maintains it until it is lost to the opposing team. Allow one team to keep possession no more than one minute. See that all players participate.

Comments: Play may get wild if allowed to because of the activity involved. Snatching the ball from a players hands, tackling and rough play should not be allowed.

This game may be played with any number of players, of three or more. Teams do not necessarily have to be even and play can be in any size area. Space should be closely related to the size of the group playing. At some time it may be necessary to limit group size. If groups are so large so as to lessen participation by all, divide the groups and set up separate play areas.

Keep play open for the students. Let the game teach the students. The students and class leaders should simply maintain interest and provide a model for play and enjoyment. The only physical skills which must be emphasized are those involed in the game.



SPUD

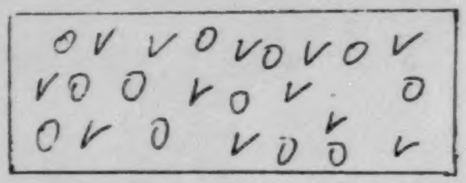
Equipment- Playground ball or volley ball
Formation- Circle facing in, boundary lines defined, one player in center of circle
Objectives- Arm, shoulder, leg and trunk development, agility, directionality, stopping, standing, bending-stretching, running, throwing with accuracy, throwing, catching

Directions for Play- Choose a player to be in the center. Form other players into a circle with one player in the center. The center player should be holding the ball. He calls out the name of one of the players in the circle and throws the ball straight up in the air. All players run away as the player named runs to catch the ball. When he catches it he calls out "halt". At this the players must stop and stand without moving. The player with the ball then attempts to hit any of the other players, scattered within the boundaries. Players may bend or duck to avoid the ball, but may not move their feet. If a player is hit with the ball he becomes "it", and takes his place in the center of the circle to start a new game. If "it" does not hit any player, he remains "it" and will start a new round. The circle must be formed before each round begins.

Comments: Spud may be played like "horse" when the player is hit or, as it, fails to hit another player , he has "s". The second time a "p" and so on until he receives "s-p-u-d". This player is the loser and begins a new game. This could be a painless way to introduce losing to the class and give a personal experience at losing for the one who spells SPUD.

The game may be made easier for "it" by allowing him to take two or three steps in one direction before throwing the ball. A variation would be to use numbers or colors for the players. In this case players may wear the number or color on their chest. This variation is suggested for ease of play and to introduce and practice color or number recognition

A second variation would be to call two or three names or give two or three players the same number or color. This way the players called would have to run for the ball and only one could get it. The player could then throw the ball at the other players. The other "called players" would be also eligible to be "it".

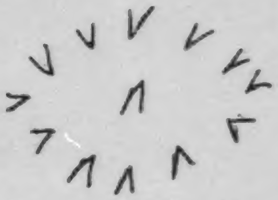


SKY BALL

Equipment- Playground ball or volley ball
Formation- Scatter, two teams, set boundaries
Objectives- Arm and shoulder development, agility, directionality, throwing and catching, movement in relation to a moving object, simple team play.

Directions for Play- Divide groups into two teams and scatter players within the designated play area. One team should be wearing colored vests. The team with the vests (Team A) starts by throwing the ball up into the air. One player from "Team B" should catch the ball before it hits the floor. The ball may bounce once before being caught. The player from "Team B" catching the ball then throws the ball into the air for a member of "Team A" to catch. If a player from one team does not catch the ball or throws it out of the playing area, the opposing team gets a point. The team with the least number of points at the end of the set time or number of rounds wins the game.

Comments: Emphasize team success and failure and each players part in what his team does.

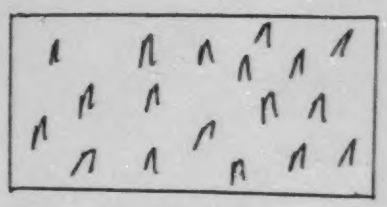


DODGE BALL

Equipment- Playground ball or volley ball
Formation- Single circle, one or more players in the circle
Objectives- Arm, shoulder, trunk, and leg development, agility, directionality, jumping, dodging, bending, stopping

Directions for Play- Form a circle and select one or two players to be in the center. The players in the circle pass the ball across the circle attempting to hit the player or players inside the circle. The player inside the circle attempts to avoid being hit. When a player is hit she takes the place of the thrower in the circle and the thrower comes inside the circle.

The ball may be thrown or rolled. It cannot hit the center player above the shoulders. Center players must remain inside the circle and cannot catch the ball. One, two or three balls may be used.

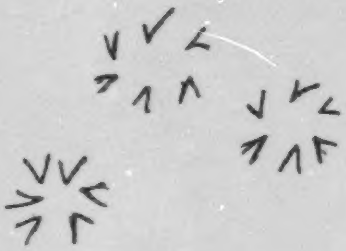


ELIMINATION

Equipment- Playground ball or volley ball
Formation- Scattered within defined boundaries
Objectives- Arm, shoulder, trunk and leg development, agility, directionality, running, jumping, stopping, dodging, throwing, catching

Directions for Play- Scatter players within the boundaries. The teacher tosses the ball into the air to start the game. The players catching the ball must stand in place. He may throw the ball at anyone. Those players without possession of the ball may move anywhere within the boundaries. A player hit by a fly ball must take a place outside the boundaries. When the ball touches the floor it is dead and may be picked up and thrown by anyone. If a player catches a thrown ball the thrower is out of the game. Play continues until four players remain within the boundaries.

Comments: This is a wide open form of dodge ball. It may be used before, after, or along with the introduction of dodge ball. The rules and play are much the same as well as the skills necessary. One ball may be used if preferable but two may be used to speed up the game and add more activity.

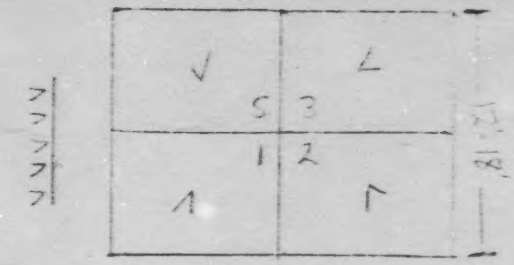


ONE TRIP

Equipment- Softballs, beanbags, small playground balls
Formation- Teams in single circles facing in
Objectives- Arm and shoulder development, directionality, throwing, catching, team work

Directions for Play- Divide players into teams and teams into circles for circle formations. Each team attempts to pass the ball safely from player to player around circle in succession before the opposing team or teams. The ball is thrown and not handed. If the ball is not caught or if the consecutive order is broken the ball is returned to the starting player and the circut is started again.

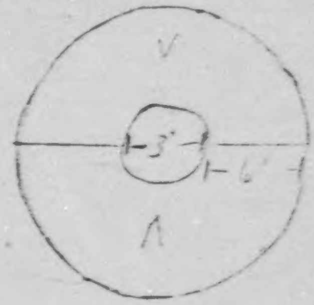
Comments: When the group requires it the ball may be handed from player to player. When this is done all teams must hand the ball so that competition remains as even as possible. This is a good game to introduce relays with. It is a simple relay without being an actual relay.



FOUR SQUARES

Equipment- Playground ball, playing court
Formation- Four players, each in their own section of the court
Objectives- Arm and shoulder development, directionality, object manipulation, throwing, catching, striking, movement in relation to a moving object

Directions for Play- This game is played like Two Square except with four squares and four players. The serving violations are the same. When a player causes a violation, he is out of the game. The new player moves into square number one, the other players rotate accordingly. The player in the service court is designated as server.



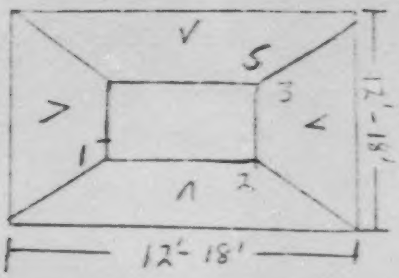
CIRCLE TENNIS

Equipment- Playground ball or volley ball
Formation- Two players each in their own section of the court
Objectives- Arm and shoulder development, directionality, object manipulation, striking, movement in relation to a moving object

Directions for Play- The game starts with the serve as in Two Square and Four Square. The serve must bounce in the center circle. The receiving player must keep the ball from hitting in her section by batting it back to the center circle. If required by players, the ball may bounce in the player's section after bouncing in the center circle. A player causing a violation must leave the game. When the server violates, the opponent takes his place and a new player enters the game.

Violations-

1. Failure to bat the ball before it lands in the player's section (or allowing the ball to bounce more than once in your section-when in effect).
2. Causing the ball to strike a line.
3. Batting the ball so that it bounces more than once in the center circle.
4. Causing the ball to rebound from the center circle so that it lands outside the playing court.



CENTER SQUARE

Equipment- Playground ball, playing court
Formation- Four players each in their own section of the playing court
Objectives- Arm and shoulder development, directionality, object manipulation, striking, catching, throwing, movement in relation to a moving object, group interaction

Directions for Play- This is another "Square" type game where the object is to keep the ball out of your area and not to cause a violation. It is played like Circle Tennis except for the four players. Again, service and rotation of players remains the same as in Four Square - new players move into court number 1 and court number 4 is the service court.

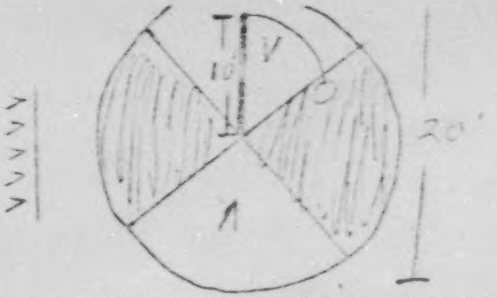
The game starts with a serve which must bounce in the center square and be easily returned. All other volleys need not be easily returned. If required the ball may bounce once in the players square before it is returned. The ball must always bounce in the center square before it can enter another court area. A player must leave the game when he causes a violation.

Violations-

1. Failure to bat the ball before it lands in players own section (does not apply when one bounce rule is in effect).
2. Causing the ball to strike a line.
3. Batting the ball so that it bounces more than once in the center square.
4. Causing the ball to rebound from the center square so that it lands outside the playing court.

Comments: This is the last of the "Square" games. It is the most difficult to play and should be introduced when the other "Square" games have been well learned. The play of this group of games can be most productive and beneficial to all those participating. Their use can continue for a good deal of time and interest be kept up over a long period.

It may be obvious that these "Square" games and the other court games can be played in relatively small areas and are not appropriate for the entire class to be involved in at one time. For this reason two, three or four small group games can be going on at the same time. Students can be in a circut-group or free to move from game to game as they wish during the period. After these games have been introduced and the students require lesser amounts of administration help the games may be played simutaneously as suggested.



TETHER BALL

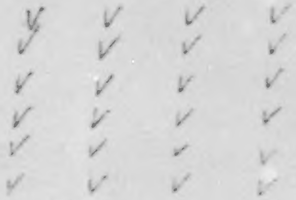
Equipment- A pole and tether ball. The ball is attached to the pole so that it hangs about three feet from the ground.
Formation- Two players each, in their own section of the court
Objectives- Arm and shoulder development, directionality, object manipulation, striking, movement in relation to a moving object.

Directions for Play- Two players take positions on the court. One player is designated server to start the game. After this, the server is the player to enter the game following a violation. The server chooses which direction to hit the ball and serves it to his opponent who must hit the ball in the opposite direction. A player causing a violation is out of the game and a new player enters in her place.

Serve- The ball is pushed easily so that it may swing around easily. The receiver must be able to return the ball easily. If the serve is not easily returned, it must be repeated. At no other time may either player push the ball-it must be batted.

Violations-
1. Touching the rope or pole.
2. Catching the ball.
3. Stepping on the line.

Utilized as it is, this game is a good way to teach and practice object manipulation and eye-hand control. It can be made more competitive by making the object of the game to wrap the rope and the ball around the pole in the direction you are hitting it. The opponent attempts to wrap the ball in the opposite direction. The serve and the violations remain the same.

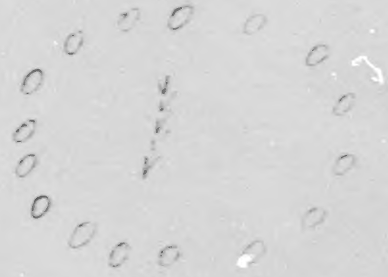


DOWN THE LINE AND BACK

Equipment- Playground ball, volley ball or softball
Formation- Single line files
Objectives- Arm and shoulder development, agility, directionality, object manipulation, giving and receiving an object, throwing and catching, group interaction, team play

Directions for Play- Divide the group into equal teams and arrange teams into files. Each team's players should not be more than one to two feet apart. The object is for each team to pass or hand the ball down their line and back before the other team or teams. The first players turns and give the ball to the next player who turns and gives the ball to the next player behind him. The ball should travel n the line and back. The first team finished fairly sits down and is declared winners. If a player drops the ball or fails to catch the ball he must carry o the first player and the team begins again.

Comments: The game may be played by handing the ball from player to player, or by tossing the ball from player to player. Also the ball may be handed backwards or bounced or whatever variety or skill in throwing seems appropriate for the game and the students. When tossing the ball each player should be five to ten feet apart. This is a good game to use as an introduction of relays and team play.

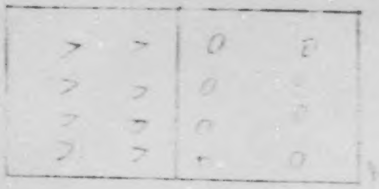


INDIAN FILE DODGE BALL

Equipment- Playground ball or volley ball
Formation- Single circle, facing in
Objectives- Arm, shoulder, trunk and leg development, agility, directionality running, dodging, jumping, movement in relation to a moving object. throwing and catching

Directions for Play- Form the circle and select three or four players to form the file in the center. The center players form a line by each player placing his hands on the player ahead of him. The players in the circle attempt to hit the player at the end of the line. The head player in the line is the chief. The chief must move the line so that the last player is not hit. The whole line works to protect the end player. Only the chief may use her hands to stop the ball. When the end player is hit he takes a place in the circle and the circle player who threw the ball is the new chief. The game continues with a new head player. The line must remain together throughout the game. All throws should be below the waist. The ball may be rolled or thrown.

Comments: Two balls may be used to speed up the game and increase the difficulty for the line players. The game is best played in groups of ten or more. If a very large group is playing, two center lines can be formed and two or three balls used. This game provides a good opportunity for the teacher to observe leadership and cooperation skills in students. The leadership necessary by the chief will be most visible. Cooperation can be seen in the close team play necessary in the center line and the group play and loose team work of the circle players. Look for an attempt to bring out these skills as they are most important in the future working career of the students.

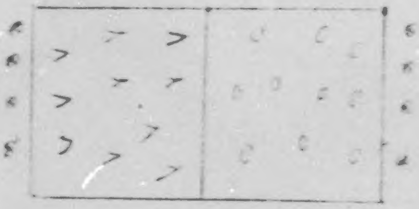


TEAM DODGEBALL

Equipment- Playground balls or volley balls
Formation- Two teams, one on each side of the center line
Objectives- Arm, shoulder, leg and trunk development, agility, directionality, running, jumping, stopping, dodging, throwing, catching, bending and stretching

Directions for Play- Divide the group into two teams and assign each team to a half of the court. Use two or three balls. Each team should have at least one ball. The game starts on the command of the teacher or class leader. The object is to hit a member of the opposing team below the waist with the ball. The ball may be rolled or thrown. A player is out of the game when she is hit with the ball below the waist; attempts to catch a ball and misses, throws a ball that is caught, hits a player above the waist, hits a player in the head, whether a catch is attempted or not. The ball must hit a player on the fly and is dead and may be touched by anyone safely after bouncing on the floor or wall. Players on one team may not cross the center line into the court of the other team. Colored vests may be used to distinguish team members of each team. At the end of five minutes the team with the least number of players on the sideline is declared the winning team.

Comments: Some variations may be added simply to the game to increase interest and provide variety. Rather than using a time limit, continue the game until all players on a team have been eliminated. When a player catches a thrown ball on the fly he may elect to eliminate the player who threw the ball or call in a player on his team from the sideline. The game may be started by placing the balls on the center line. Each team then runs out to get the balls and may begin the game when a team gains possession of a ball. Do not allow players to dive after ball as severe injury may occur.



PIN BOMBARDMENT

Equipment- Indian clubs or bowling pins, playground balls or volley balls
Formation- Two teams, each on its own half of the playing court
Objectives- Arm, shoulder, trunk and leg development, agility, directionality, running, jumping, bending, stretching, stopping, dodging, movement in relation to a moving object, throwing, catching

Directions for Play- Divide group into two teams and assign each to a half of the court. Place three or four, an equal number per team , pins on the back line of each team's area. Assign guards from each team to guard the pins. Other team players aid the guards and attack the other team. The object of the game is to knock down the clubs of the opponent, and/or eliminate the opposing players. The game starts with each team having at least one ball. Use two, three or more balls.

A player is eliminated from the game if hit by a ball before it bounces or if, while attempting to catch a ball on a fly, she drops it. Once eliminated the player may not return to the game. Players may not cross the center line. A ball may be picked up and thrown after it hits the floor. The game is ended when all the players from the team are eliminated or their pins are knocked down.

Comments: Emphasize throwing the ball below the waist. Encourage players to protect the clubs by catching the ball.

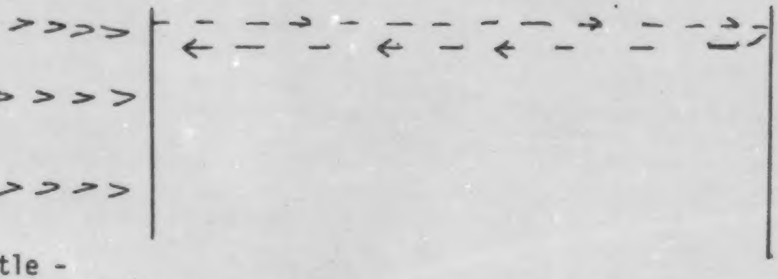
RELAYS

Useful Suggestions For Play

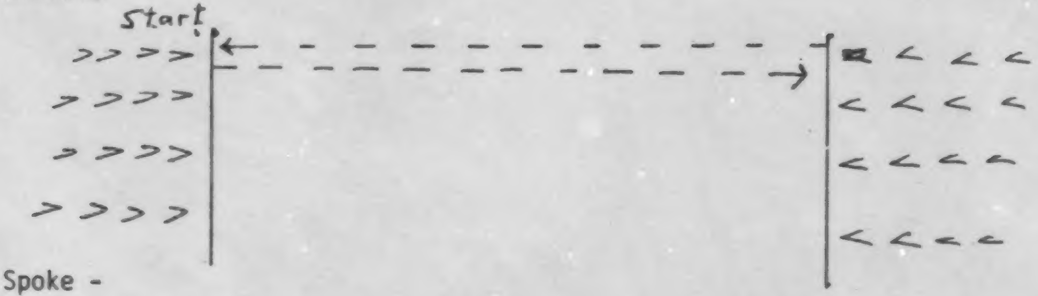
Equipment- Have all necessary items on hand for immediate use.

Formations-

Single files -



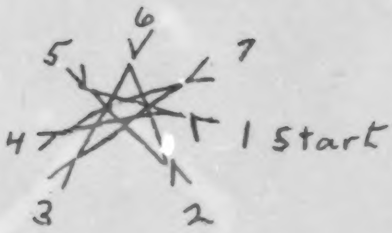
Shuttle -



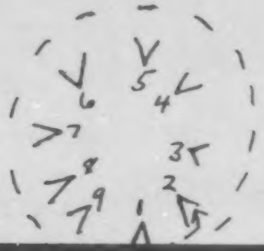
Spoke -

Circle

1.



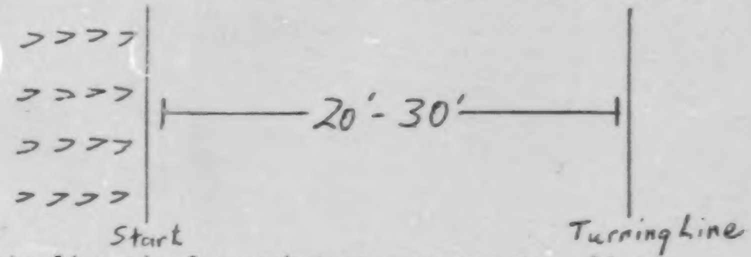
2.



Team Balance- Teams should be equalized in number and ability as much as possible. If numbers are not equal, have the number from the team with the fewest members perform twice.

General Guides-

1. Team size should be appropriate for the class. Use 3 or 4 teams of 6-8 members. This allows for more participation.
2. With students sitting in the desired formation, explain how the relay is played. Demonstrate with class members when possible.
3. Be sure everyone knows where the starting and finishing lines are.
4. Describe and demonstrate the signaling of the next player. Use a shoulder touch when possible. Students should pass on the right.
5. Give a definite and consistant starting signal; e.g. "Ready", "Set", "Go". Have a definite and consistant ending formation; e.g., all sitting.
6. If you wish to assign scores for the relays, first -5 points, second -3 points, third -2 points, and fourth -1 point. Tally the score at the end of the period and declare a winning team along with 1st, 2nd, 3rd and 4th places.



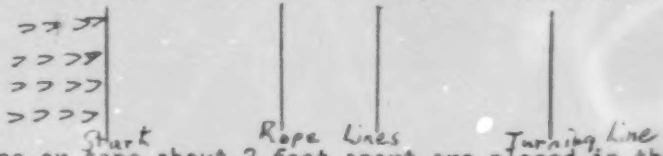
LEVEL I RELAYS

Equipment- One Indian club or bowling pin for each team, rope or tape lines
Formation- Files, two or more teams, a starting line and turning line 30'-40' apart
Objectives- Trunk and leg development, agility, body image, directionality, running, jumping, stopping, turning, skipping, team play, group interaction, self image development

Directions for Play- Run Down and Back - Each team member in turn runs to the turning line. Touching the line, she returns to tag the next team member's left shoulder, then goes to the end of the line. The relay continues.

Jump Down and Back- Repeat as in the above except substitute jumping for running. Each player must jump, two foot take off and landing. Some players may be allowed to jump one way and run the other.

Other variations of locomotor skills may be added here under the same basic relay. As the class skill level progresses use hopping, skipping, slidding, and gallopping.



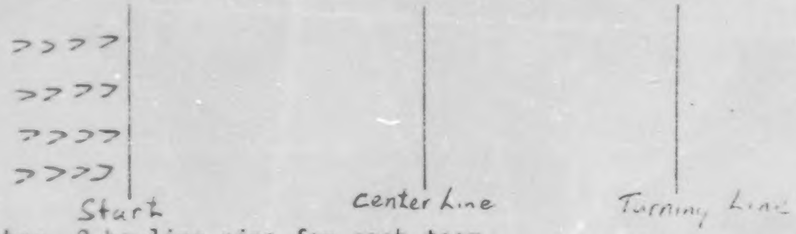
Jump the Brook- Parallel lines of rope or tape about 2 feet apart are placed in the center of the play area. Each player in turn runs and jumps or leaps across the parallel lines (brook). Each player then continues to the turning line and returns, jumping the brook again and tagging the next team member. The relay continues.

Sore Toe- The first player on each team stands on one foot and grasps the other foot with one or both hands in front of the body. Maintaining this position he hops to the turning line, circles the bowling pin, releases the foot and runs to tag the next team player. The next player should be standing on one foot ready to begin when she is tagged.

Using the above format introduce other locomotor skills such as jumping, skipping, gallopping, and sliding. Each time the player moves around the bowling pin placed on the turning line.

Comments: Variations and combinations of movements may be used on this level without changing the up-and-back format. Combine running with walking, hopping with running or jumping, skipping with hopping, etc. Many variations are possible here. The use of each skill is highly dependent upon the overall skill level and handicaps of the class. The primary purpose of these relays is to introduce the relay as a type of game, develop some team awareness, and practice basic skills.

The skills used in these relays and in others to come must be used strictly with the class members in mind. Skipping and gallopping are high level skills and would not be appropriate for use with a class whose members are hardly able to jump or hop consistantly over the relay route. Although games and relays can teach skills, a basic level of awareness and ability of those skills must be present. This would require group or individual drill on the skill to be practiced in the game or relay.



RELAYS SERIES II

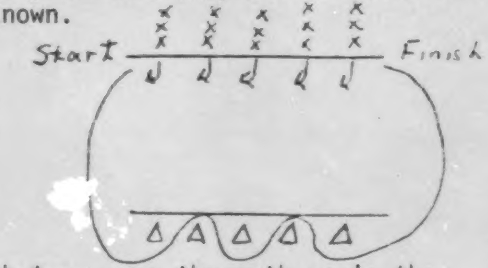
Equipment- Beanbag, can or box, 2 bowling pins for each team
Formation- Files, two or more teams behind a starting line, a turning line 30-40' from the starting line and a center line between the two lines
Objectives- Arm, shoulder, trunk and leg development, agility, body image, balance, directionality, running, jumping, throwing, object manipulation, self-image, team play and group interaction.

Directions for Play- Beanbag Balance- Use a bowling pin at the turning line. A beanbag is placed on the head of the first team player. Each player in turn walks to the turning line with the beanbag on his head. He walks around the bowling pin and returns to his team. He places the beanbag on the head of the next player and the relay continues. The beanbag must remain on the players head and her hands may not touch the beanbag at anytime. If the beanbag falls off, it is picked up and put back on the player's head and she continues. If a player has extreme difficulty keeping the beanbag on her head, she may hold it with one hand.

Run and Knock Down- A bowling pin is placed on the turning line in front of each team. Each team player in turn runs to the line, kicks over the pin, stands it up again and returns to his team to tag the next player. The relay continues.

Triple Runaround- Two bolwing pins are placed in front of each team. One pin on the center line and one on the turning line. Each player in turn runs around the first pin (center line) then the second pin (turning line) then to the first pin and around, and back to tag the next player. The relay continues.

Shuttle Clubs- Two pins are placed on the turning line for each team. The first player runs to the turning line and carries one pin to the center line. He then returns to carry the second pin to the center line and returns to the team to tag the next player. The second player returns the pins, one at a time, to the turning line. Each team will go through only one time. If desired, the teams may go through twice, giving each player a chance to perform each part. Be sure that the beginning and the ending team players are known.

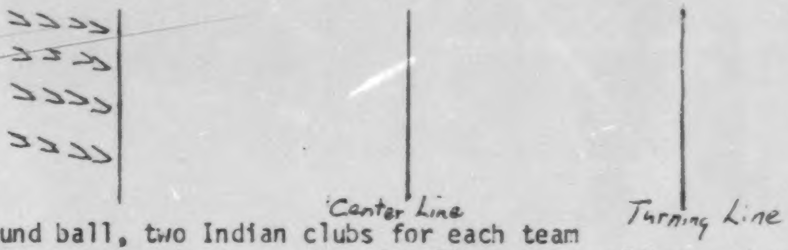


Zig-Zag- The first player on each team runs the path as in the diagram in a counter-clockwise direction through the pins and back to tag the next player on her team. Each succeeding player must wait until tagged to begin. Be sure all players run the same course to avoid collisions.

Beanbag Pitch- The object of the relay is to knock over the bowling pin placed on the center line or turning line in front of each team. The first player throws the beanbag at the pin. She then runs to retrieve the bag and throw it again unless it was knocked over. She continues to attempt to knock over the pin with the beanbag. When the pin is knocked over it is returned to its place and the player runs to tag the next team member in line, giving him the beanbag. The relay then continues. The pins may be placed on the center line if players are unable to throw at the turning line.

Alternate Beanbag and Can- A large can or box, about 8-10" square, is placed on the turning line. The first player taking the beanbag, runs to the pin and puts the beanbag in the can. The beanbag must be placed and not thrown. The player returns to tag the next player. The second player runs to retrieve the beanbag. He returns the beanbag to the next player who begins a repeat of the cycle. The action continues. Teams may go through once, or twice to allow more participation.

Comments- For the first two levels and for the third level all may participate. Even though the person's handicap may not allow performance of the skills required the ability to participate by some means in a team effort is well worth whatever is needed. This set of relays use base level skills but in a more complex format. The students are required to perform skills already learned and also cope with obsticles which are part of the game. It should be understood that because of the added obsticles to skill performance these relays may at first be difficult for most students. The eventual outcome and skill development and control more than equal the initial difficulties. Extra time should be taken for introduction of each relay and no "short-cuts" should be taken to simplify play.



LEVEL III RELAYS

Equipment- Playground ball, two Indian clubs for each team
Formation- Files, two or more teams, a starting line, center line, and turning line
Objectives- Arm, shoulder, leg and trunk development, agility, body-image, directionality, bending, stretching, standing, running, stopping, turning throwing, kicking, foot dexterity, group interaction, team play

Directions for Play- Overhead Pass- An open file formation - spacing two to three feet between players. Each player in turn holds the ball overhead and throws the ball to the next player in line. When the last player in line receives the ball he runs to the head of the line and begins the cycle again.
This continues until each player is in his original position.

Underleg Pass- The team players line up in an open file formation. Each player stands in a stride position. Beginning with the first player the ball is handed between the legs to the player behind her. Play then continues as above until each player reaches his original position in line.

Over and Under Pass- An open file formation is used. The first player passes a ball over her head back to the next player who passes the ball between his legs. The third player receives the ball and passes it back over her head to continue the cycle. Play continues until each player is in her original position.

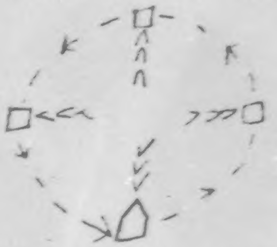
For the above three games, the ball is held on the floor by the first person to start the relay. Rather than throwing the ball, players may hand the ball as indicated by the relay from one player to the next.

Throw and Sit- The first player stands five feet from the starting line facing her team. On the starting command she passes the ball to the next player who catches and returns the ball then sits down on one side of the line. The third player steps up to the starting line, and catches and returns the ball and sits down. Each player takes and returns a pass from the front player until each team player has had a turn out front.
This is a good game to use just for fun, without competition between teams. This could apply for any other relays.

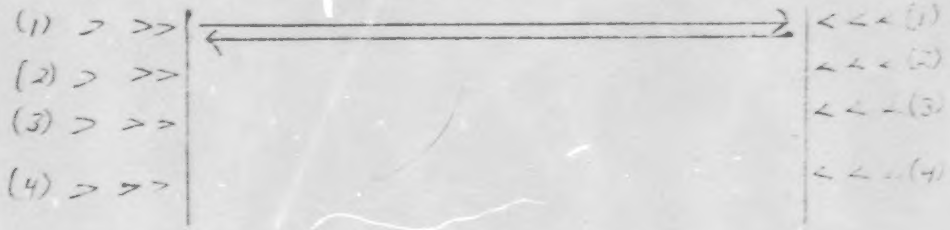
Roll the Ball- The first player begins with the ball on the floor. At the starting command, the first player rolls the ball to the turning line. The ball is then rolled around the pin and rolled to the starting line. The ball is then handed to the next player, continuing the relay.

Dribble Around- Each player is succession runs to the turning line dribbling the ball, around the pin placed on the line. The player then returns, still dribbling the ball, to the starting line and and hands the ball to the next player. The relay continues. The ball may be dribbled with one or both hands.

Foot Dribble Around- A bowling pin is placed on the turning line in front of each team. A ball is placed on the floor in front of each team. The first player kicks the ball toward the turning line and around the pin and returns to his team with the ball. The ball must be controlled with the player's feet. The action continues one time through each team.



Base Running Relay- A relay baton or other object which may be easily passed is used. One for each team. If these are not available, players may tag. Teams line up in files as in diagram on the inside of the baseball diamond or at four bases placed outside or in the gym. On the starting command the first runner from each team starts at her base and runs around the outside of the other bases. The bases do not need to be touched. When she reaches her own base she passes the baton to the next player, who continues the relay. The team whose last runner first reaches his home base is the winner.



Shuttle Relays- A relay baton or other object to be passed is necessary for this relay. After making up teams divide them in half and line each half behind two lines as shown in the diagram. Teams should be equally divided if at all possible. A leader is chosen for each team who is to start the relay. All team leaders start on the same side. Beginning with the leader, each player runs across to hand the baton to (or tag) the next player on the opposite line. This continues until all players are in their original positions.

With these relays the baton may be used to pass or players can be tagged. The skills used in previous relays-jumping, hopping, etc., may be used within this relay formation.

LEAD-UP GAMES

Lead-up games are in and of themselves active and enjoyable games. They are also closely related to individual and team sports which are played for recreation and sport wholly and do not necessarily serve a teaching or learning role. Lead-up games are tools for learning and practicing skills, physical, social and cognitive, required for eventual participation in sports.

Lead-up games contain many of the aspects of the sport to which they are related. Many of the rules are the same but usually adapted to suit a learning format. The important similarities between the game and the related sport are the like skills used in each.

The purpose of a lead-up game is to provide a situation where sports skills can be learned, practiced and refined in a teaching-learning situation. The sport does not provide this. Sport is for fun, enjoyment and recreation. This is not totally possible when the skills necessary are not well practiced by all participants. It is then the role of the lead-up game to bring the student to the point in adult life where sports can be played and enjoyed as a recreational pursuit.

The following games are grouped according to the related sport. Their purpose for this program will be to teach the skills involved and not necessarily to serve as a step to sports participation. It is the expressed objective of this program to provide skills and abilities necessary to participate successfully in recreational sports and other related games in adult life. This will be an all-encompassing objective which should be kept in mind as a long term goal and not as an immediate objective.

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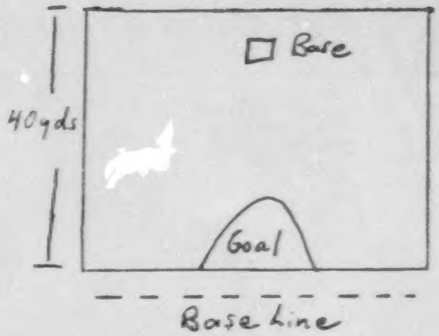


SOCCER KICKBALL

Equipment- A soccer ball, one base
Formation- Two teams
Objectives- Leg development, agility, body image, directionality, running, stopping, turning, throwing, catching, kicking, base running, eye-foot coordination (target kick), team play.

Directions for Play- Separate the group into two teams. One team is designated as kickers, the other as fielders. The fielders scatter within the playing area outside the goal area. Kickers line up behind the base line.. Each member of the kicking team in turn has a chance to kick the ball. The object of the game is to kick the ball from the goal line, run down the field to the base, around, and back to the base line before the fielding team can make a goal.

When a member of the kicking team kicks the ball into the field, the fielder attempts to retrieve the ball. Passing the ball, by use of the feet only, the team gets the ball into position to make a goal. An attempt is then made at the goal. The team may continue to kick to the goal until a goal is made or the runner completes a run to the base and back. If the runner is able to reach the base line before a goal is scored, her team receives two points. If the fielding team scores a goal before the runner reaches the base line that team receives one point. The game continues until a pre-determined number of rounds are completed. A round is completed when all members of both teams have had a chance to kick. When each member of the kicking team has had a chance to kick and run the teams switch and the kickers become the fielders, the fielders the kickers.

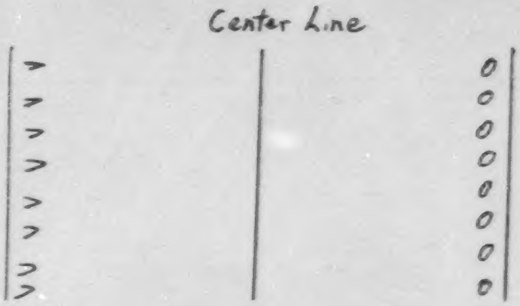
Scores may be awarded to the kicking team as described above and when a foul occurs in the field. The scoring fouls are as listed below.

1. Touching the ball with the hands or arms.
2. Being inside the goal area when the ball is being kicked into the field or when a teammate is attempting a goal.

Kickers are out and may not score under the following circumstances.

1. Failing to cross the base line before a goal is made.
2. Failing to round the base in their run.

Comments: It may be evident that skills for both soccer and baseball are in use with this game. It therefore may be used as a leadup for both. However, its greatest use lies in the soccer skills of kicking, trapping, and dribbling. The effort which should be put into the team play activity of the fielding team especially cannot be overemphasized. If necessary, take time to work simply on the fielding aspects of the game with the entire class. If anything, the team work required to play these games and their related sports successfully is most important to the individual student's future in work and play. Therefore put great emphasis on the student's team play and all phases of the lead-up games.

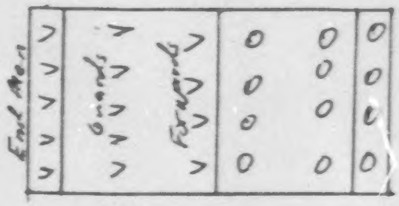


LINE SOCCER

Equipment- One soccer ball or playground ball
Formation- Two teams in lines on their own goal lines
Objectives- Leg development, agility, body-image, directionality, running, stopping, kicking, trapping, blocking, moving in relation to a moving object, eye-foot coordination (target kick) self-image development, group interaction, low level of team play

Directions for Play- Two teams stand on their respective goal lines. Each player on both teams have a number. If teams are uneven, one player should have two numbers. A leader is chosen who is to call out players by number. One number is called and the players one from each team, run out and attempt to kick the ball to their opponents goal line. To score, the ball must go over the goal line. The players on the line may trap, block or kick the ball to prevent a goal. They may not use their hands. Play continues until a goal is scored.

Comments: Play may continue for a specified amount of time or until a selected score is reached. However, this is not feasible unless scoring is high. As the skill of the players increase in team play and physical abilities two or more numbers may be called at the same time. Encourage passing and dribbling to maneuver for a goal. Kicking above the shoulders should be discouraged and does not count as a score.



END BALL

Equipment- Playground ball or volley ball
Formation- Scatter, two teams, each on their own half of the playing court
Objectives- Arm, shoulder, and leg development, agility, directionality, running, jumping, stopping, kicking, turning, trapping, blocking, team play, group interaction, team responsibility (playing a position)

Directions for Play- Divide players by teams in the positions as designated. Name players' position, responsibilities, and play area limits. End players must stay within their marked areas. Opposing players may not step inside the end area. Guards may travel only on their side and may not cross the center line. The forwards may move anywhere within the play area after play has started, except the end area.

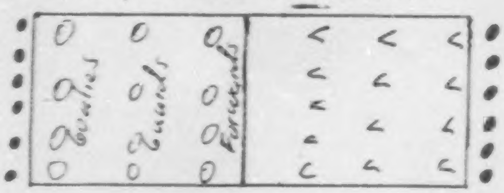
The object of the game is for one team to pass the ball back to its end players. The end player must catch the ball to score a point. If not, no point is awarded. The game begins when the ball is bounced on the center line. It should be bounced so that it rebounds straight up in the air. The team recovering the ball attempts to get the ball to their end men. The opposing team attempts to prevent this action and get the ball to their end men.

Play continues until a point is scored. At this point the score of the game is announced and the teams rotate position. Guards become forwards, forwards become end-men, end-men become guards. The game resumes and may continue for a time limit or a specified score. If a player advances into restricted territory, it is a foul and the ball is given to the other team.

Comments: If scoring takes too long team positions may be rotated every four to five minutes. This is the first game where players have specific responsibilities in relation to the team work required. Each player must work with his team within prescribed limits of his position. The player must also be familiar with the limits and duties of all three positions. This will take a great deal of work and drilling to make each student aware of all positions and designated rules. If necessary, begin by assigning a position for each student and do not switch. From this point gradually move the more advanced players into other positions as they become ready to accept multiple duties.

A drill which may be of help to begin with is to play the game with the entire class as one team. Thus taking away the competition and working strictly with team work and position duties. The players will become more aware of what is to be done and how to do it. Another factor which can be considerd in a drill of this type is the defensive responsibility of the forwards on the team without the ball. Unless a strong competitive urge is present, this is a difficult concept to teach or develop with any student. It will come but only with much effort.

Colored vests may need to be used to distinguish both teams and positions to begin with. Use vests to distinguish teams when positions are learned.



END-PIN SPEEDBALL

Equipment- Soccer ball, volleyball or playground ball, 8-12 Indian clubs or bowling pins.

Formation- Two teams within their own play areas as in the diagram.

Objectives- Arm, shoulder and leg development, agility, body image, directionality, running, stopping, dodging, catching, throwing, trapping, kicking, eye-foot coordination (target kick), team play, position play, group interaction.

Directions for Play- Deploy teams on their respective play areas and position players. Explain duties of the guards, forwards and goalies. Goalies protect the pins, guards keep the ball in the forward part of the court, forwards advance the ball to the center line and attempt to score points. The object of the game is to score points by knocking over the opposing team's pins. One point is awarded for each pin knocked over by a ball thrown or kicked from the other team.

The game begins with a center kick by a player on one of the teams. A point may be scored on this kick. All players must remain in their area on their half of the court while the ball is in play. Play continues until a pin is knocked over. Players on both teams rotate positions; guards to forwards, forwards to goalies, goalies to guard; and the pin is replaced. The team scored upon begins the game again with the center kick.

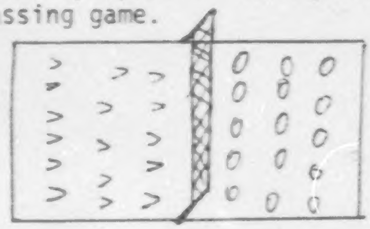
Passing the ball may be limited to the legs and feet only or throwing with the arms, or both may be used. If the ball is a ground ball, it must be trapped and not caught. The player may then pick up the ball if throwing is allowed. The ball is played back and forth between teams until a score is made. Encourage passing among the team members to advance the ball forward and to out-maneuver the opposing team members. An out-of-bounds ball is put back into play by the nearest player of the opposing team.

Fouls:
1. Using the hands to stop the ground ball.
2. Crossing the center line.

The penalty for a foul is a free kick by a player of the opposing team. The free kick is made at the center line and may not be interfered with. If a pin is knocked down one point is scored. If no point is scored, the kicking player makes an attempt to begin the game again. Play continues to a predetermined score or designated score.

Comments: Looking at the simplicity of this game in respect to team play, this game would be ideal to drill on these play factors. It may be used best before or in conjunction with End-Ball. It is also possible to incorporate parts of each game to make a separate game consisting of the factors of team play, and lacking a great deal of strategy, competition and a higher level of skill performance. This would allow practice of needed skills and abilities under circumstances where learning may more simply take place.

The main strength of this game is its emphasis on simple position play. It should be used mainly to teach these skills. To introduce and practice specific physical skills, put limits on ball handling as suggested in the game directions. Allow the players to both throw and kick to begin with, but gradually put in limits on handling the ball. It is the ultimate purpose of this game to be strictly a kicking, trapping and foot dribbling and passing game.

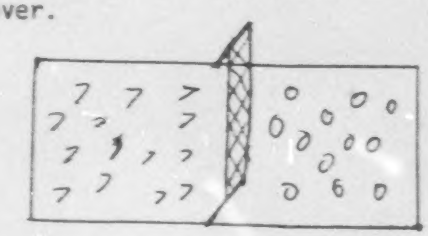


NET RING TOSS

Equipment- Deck tennis ring, volleyball net and standards.
Formation- Two teams, one on each side of the net, scatter
Objectives- Arm, shoulder and leg development, agility, directionality, running, jumping, sliding, throwing, and catching, movement in relation to a moving object, team play, group interaction

Directions for Play- Deploy teams in their court areas. Players should be spread out so that the area is covered. Describe and define each player's area. The game begins when one team throws the ring over the net. If the thrower fails to get the ring over the net, a point is scored for the other team. If the team fails to catch the ring thrown over the net a point is scored for the throwing team. A throw landing outside the playing area scores a point for the other team. When the ring lands on the floor, the nearest player to it picks it up and begins the game again. The game continues with volleys back and forth over the net until a point is awarded or a time limit is reached.

Comments: The scoring could go up to 15, a team winning by 2 points. This is the scoring in volleyball and is easy to begin at a low level. Another variation would be to require that a pass be made to a teammate before the ring is thrown over the net. The formation can also be varied to files so that players play a more structured position. Players may change positions from time to time but do not institute rotation at this time. The net may be placed at a low position to make it easier to get the ring over.

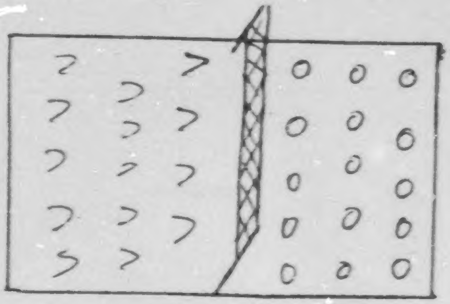


ONE BOUNCE

Equipment- Playground ball or volley ball, net and standards
Formation- Two teams, one on each side of the net
Objectives- Arm, leg and shoulder development, agility, directionality, jumping, stopping, catching, throwing, movement in relation to a moving object, team play, group interaction

Directions for Play- With teams on their respective sides of the net play is started when the ball is thrown over the net by a player of one team. The receiving team must catch the ball on the the fly or following one bounce. If they do not, a point is awarded to the team throwing the ball. When a player has caught a ball he may not take a step. The player then throws the ball over the net to the opposing team. Points may be scored when the ball is thrown out of bounds, if the ball does not go over the net on a throw, or if it is dropped when a player attempts to catch the ball. When a point is scored, the team scoring the point begins a new round.

The game continues until one team reaches 15 points. This team is declared the winner. If necessary a time limit may be set on playing time. The team with the most points at the end of time is the winner.



NEWCOMB

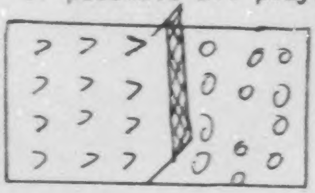
Equipment- Volleyball, net and standards
Formation- Two teams, one on each side of the net
Objectives- Arm, shoulder and leg development, agility, directionality, running, jumping, throwing, catching, team play, group interaction

Directions for Play- The player in the back right corner (facing the net) is designated as server to start the game. From this position the server throws the ball over the net to the opposing team. The ball continues to volley over the net until a point is scored. When a ball is not caught, dropped, does not clear the net or lands out-of-bounds a point is awarded to the other team. A player catching the ball may not move his feet. She may either return the ball over the net or pass the ball to a teammate. Two such passes are allowed by a team before the ball is thrown over the net. Each time a team scores a point it serves again. Change servers often so that everyone gets a chance to serve.

The game is played to 15 points or to a time limit. In either case the first team to reach 15 points wins.

Comments: Encourage the players to move and catch the ball. Everyone should be able to handle the ball more than a few times during the game. If necessary require teams to pass the ball before it is thrown over the net. This is not desirable but may be necessary to increase participation and team play.

Rotation of position may be used following each point scored. This may be a set rotation or simply changing servers. If possible all players should have a chance to play in all positions.



VOLLEYBALL MODIFIED

Equipment- Volleyball, net and standards
Formation- Two teams, one on each side of the net, 6, 9 or 12 players on each team
Objectives- Arm, shoulder, leg development, agility, directionality, running, stopping, jumping, throwing, catching, striking, position play, team play, group interaction

Directions for Play- The game is played as regulation volleyball excepting for the modifications given below. An explanation, description and rules of regulation volleyball will follow the description of this game.

Modifications are as follows:

1. The server serves from the center of the court
2. Two or three service trials may be permitted
3. A teammate may make an assisted serve by relaying a ball which has been served in an effort to get it over the net. Only one assisted serve is allowed.

4. During the volley an unlimited number of players may bat the ball before it goes over the net. (This may need to be limited to keep a more normalizing play situation.)
5. Position play should be encouraged, but may be suspended if necessary.
6. The ball may not be hit more than three times in succession by the same player.
7. The ball may be played from a bounce or from the air.

Comments: Any or all of these modifications may be used. The needs of the class should be used as a guide when using modifications. When they are used be prepared to gradually remove them from use. The ultimate goal is for the students to play the regulation game and not necessarily a modification. The adapted game is best used to fit weaknesses and needs of students still learning the various skills of the game. As the skills are learned, more enjoyment and satisfaction results from the participation in the unaltered game.

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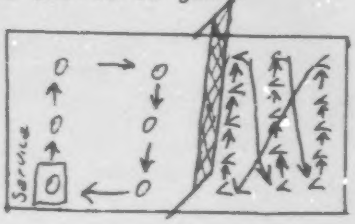


VOLLEYBALL

Equipment- Volleyball, net and standards
Formation- Two teams, one on each side of the net.
Objectives- Arm and shoulder, leg development, agility, directionality, jumping, running, stopping, striking, giving and receiving force to an object, team play and group interaction

Directions for Play- Volleyball is played on a 30' x 60' court. Dimensions may actually vary with the gym size and available space.

The following are basic rules: (use modified rules as needed)

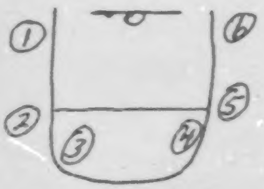
1. The ball is served from the back right hand corner of the court. The server stands behind the end line when necessary.
2. Only the serving team may score. The receiving team gains the serve when the serving team fails to return the ball over the net.

   The serving team scores when the opponent is unable to return the ball fairly over the net.
3. Team gaining the serve must rotate before beginning the serve (two rotations diagrams are shown above . Number one is for a team of six players and number two is for teams of 9 or 12 players.)
4. Players may not reach over or touch the net.
5. A player may not play the ball twice in succession.
6. The ball is played a maximum of three times by any one team before going over the net.
7. A ball touching a boundary line is considered in bounds.
8. A team wins when it scores 15 points and has at least a 2-point advantage. Play continues until the two point advantage is obtained.

9. Teams exchange courts at the end of each game.
10. The losing team begins a new game.

Comments: This game is given as a basis for a presentation of the game of volleyball. It should be understood that this game, as all the others, needs to be adapted for the needs and abilities of our students. By giving possible modifications along with the rules for the actual game the class has a point of beginning, the use of suitable modifications, and a goal to be reached, participation if all in the regulation game of volleyball.

Initiating the game, the teacher uses any or all modifications necessary to allow all to participate. As skills and abilities of team play and game play improve, remove adaptions and put the normalizing rules into the game. Make changes as required and as the students' skill level warrants to maintain both interest and active participation.



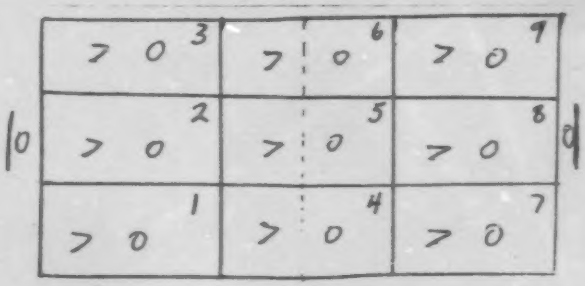
SIX-HOLE BASKETBALL

Equipment- Basketball goal, basketballs or other suitable balls
Formation- Six three-foot circles are marked as in the diagram (players stand in each circle)
Objectives- Arm and shoulder development, directionality, throwing, catching, eye-hand coordination, object manipulation (target throw), group interaction, self image development

Directions for Play- The object of the game is to successfully shoot and make a basket at each of the positions, beginning with number one and progressing around to number six. Players advance from one spot to the next by making a basket. A player may progress as long as she continues to make baskets. When a shot is missed the player is stopped at that point and awaits her turn to shoot again. Each player in turn attempts to make a basket beginning with the first circle. The first player to complete the circuit successfully is declared the winner.

A time limit may need to be imposed. They player who has successfully progressed the furthest after a designated time period is declared winner.

Comments: This is a specific skill lead-up game. The emphasis of the game is placed on shooting. Only those students who are at a higher level in the shooting skill will likely succeed consistantly. Make and use adaptions as necessary to suit individuals. The adjustable backboards may be used and placed at varying heights to suit special needs. Students lacking ability may be allowed to shoot from points closer to the basket. If necessary students in wheelchairs who may be extremely weak may use a barrel on the floor. The distance from the barrel may be varied to accommodate the needs of the student. Use more than one basket in any case so that the playgroups are small. Limit group to five or six students if possible.



NINE-COURT BASKETBALL

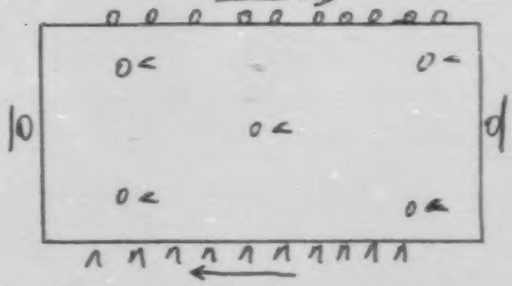
Equipment- Basketball goals, basketball
Formation- Two teams, each numbered one through nine.
Objectives- Arm, shoulder, and leg development, agility, directionality, stopping, turning, sliding, dribbling, bouncing, throwing, catching, team play, group interaction, self image development, position play

Directions for Play- After teams have been chosen and positions, one through nine assigned players take their places on the floor in the designated areas as in the diagram. Players in the three areas near their own goals (numbered 1,3,7,8,9) are forwards; those in the same areas near their opponents goal are guards. The jumping centers on each team occupy the center area (number 5); in the other center areas (numbers 4 and 8) are the side centers. The object of the game is to pass the ball amoung team members to advance the ball to the forwards who may make goals. The rules of basketball apply excepting for modifications which must be made for a specific handicap or a wheelchair student, and the following exceptions:

1. The ball may be bounced only one time by an opponent.
2. Only forwards may attempt to make goals.
3. A free throw may be attempted only by the center forwards in spaces number 2 and 8. The other players in the area must leave and stand in another forward court until the ball is thrown.
   The player attempting the free throw may not step over the free throw line until the ball has left his hands.
4. A ball may not be thrown from one end of the court to the other without being relayed at least by one of the center players.
5. Players must rotate following a goal, moving to the next highest numbered area.

Comments: Nine Court is a game which like End Pin Speedball, which emphasizes position play. Rotation may be eliminated to allow players to become acquainted with a position before moving to another position. Rotation should not be totally eliminated, however, as it is necessary to acquaint all students with as many positions and experiences as possible.

Emphasize the position responsibilities of each player. If possible, players may be assigned positions according to skill levels and individual abilities. (Good shooters may be forwards, tall players center, etc.) Emphasize also passing among team players to maneuver to a good shooting position and get the ball from one end of the court to the other.



SIDELINE BASKETBALL

Equipment- Basketball, basketball goals
Formation- Two teams on opposite sides of the playing court

Objectives- Arm, shoulder, and leg development, agility, directionality, running, stopping, sliding, dribbling, bouncing, throwing, catching, team play, group interaction

Directions for Play- Divide the class into teams. Each team should be numbered so that there are groups of five players, each group on the team is assigned a number (1, 2 or 3). The number 1's from each team begin the game. The remaining team players stand on their side of the court, spread the length of the playing court. The game may be played full or half-court.

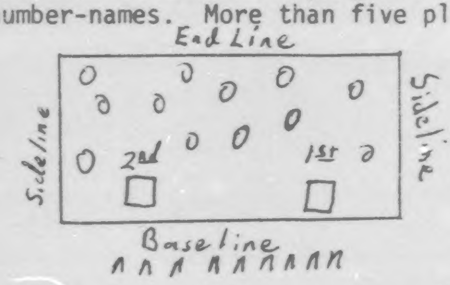
On the court players take regular basketball positions. Play proceeds as in a regular game excepting for the use of the sideline players and other modifications as given below. When a point is scored by one team, the next set of team groups come on the court replacing the teams on the court. That is, when a score is made the number 1's step to the sideline and the number 2's from each team take the court for another scoring play. The game continues as team groups rotate in and out for a specified time limit.

Regulation rules of basketball apply except as follows:

1. The players on their court must pass to a sideline player before passing to another court player.
2. The ball may be dribbled a maximum of two times.
3. Line players may not step into the court while the ball is in play.
4. Sideline players may not pass the ball to another sideline player.

An infraction of these regulations or any applicable rule of basketball is considered a violation. The penalty for a violation is awarding the ball to the opponent's sideline. If the violation is a foul, a free throw is awarded to the player fouled.

Comments: If it is not possible to have equal groups of five on each team see that they are at least ten or more players on a team and that team groups rotate in groups of five. Thus the first five players play first, the second five next and succeeding groups of five as they are filed on the sideline. Be sure that groups returning to the sideline go to the end of the line and the line progresses in one direction. Colors may be used in place of number-names. More than five players may be used on each team if necessary.



TWO BASE KICKBALL

Equipment- Playground ball or soccer ball, two bases
Formation- Two teams, one behind the baseline, the other on the field-scattered
Objectives- Arm, shoulder, trunk and leg development, agility, directionality, running, throwing, kicking, stopping, team play, jumping, catching

Directions for Play - The fielding team is dispersed on the field within the playing area and the kicking team stands behind the baseline. In turn each kicking team player places the ball on the baseline and tries to kick it into the playing field. Only one kick is allowed and a missed attemptis an out.When the ball is kicked the kicker runs to the first base, and then second if possible. The object is to run from first to second and across the baseline at any point fairly to score a point. Players may advance fairly only when the ball is kicked or is being played upon by the fielding team. There may be any number of runners on the bases at the same time. When a player leaves a base, he may not return.

Fair ball- Any ball kicked or landing within the playing area.
Dead ball- A ball landing outside the play area on the fly or rolling across the base line. Base runners may not advance when the ball is dead.

A player is out when: 1. He kicks the ball out of bounds on the fly. 2. Is hit or touched with the ball below the shoulders when not on a base or behind the base line. 3. Misses a kick attempt. 4. When a kicked fly ball is caught by a fielder.

A team is out when each player on a team has had one attempt to kick the ball. At this point the kicking team takes the field and the fielding team becomes the kicking team. A round is when each team has had a chance at kicking. The game continues for a specified number of rounds or a time limit.

KICK THE OLD CAT

Equipment- Playground ball or soccer ball, two bases
Formation- Similar to softball on a baseball field
Objectives- Arm, shoulder, trunk and leg development, agility, directionality, running, jumping, kicking, catching, throwing, group play

Directions for Play- Number all players consecutively. Numbers one and two are, kicker and catcher respectively. The rest of the players are designated as fielders. Fielders are scattered within the play area. The catcher stands behind home-plate. The kicker places the ball on home plate and attempts to kick it into the play area. When the ball is kicked the runner attempts to run to the base and back to home plate before the fielders can return the ball to the catcher. If the kicker fails or if the ball is caught by a fielder on a fly, the kicker is out. If the kicker returns safely, he may attempt another kick and continue to do so until he is out. When a kicker is out the catcher becomes the kicker and the other players advance one position by number. The kicker becomes the last player.

Continue play until all players have had a chance as kicker or for a specified time period.

Comments: The number of successive kicks a kicker has can be limited if necessary. Emphasize group participation and skill practice and development.

FIST FUNGO

Equipment- Playground ball or volleyball, one base
Formation- Two teams, each numbered consecutively
Objectives- Arm, shoulder, trunk and leg development, agility, directionality, running, throwing, catching, eye-hand coordination, striking, team play

Directions for Play - Choose teams, give the team players consecutive numbers and designate the defensive and offensive team. The offensive team sits in batting order outside the play area. The fielders scatter in the play area behind the center line. One defensive player is designated as catcher and stands behind the home base.

The number-one player on the offensive team is up to bat first. The batter stands on the home base and bats the ball with an underhand volleyball serve. When the ball lands behind the foul line, the batter attempts to run to the first base area safely. The defensive team attempts to quickly relay the ball to a player near the runner who attempts to hit the runner before she reaches the first base area. The player with the ball may not take more than one step before throwing the ball.

When a runner reaches the base area safely he must remain there until he can be driven home for a score. To score the player must run safely from the base area to the home base without being hit by the ball. The runner is safe in the first base area. No advancement may be made when a fly ball is caught. An offensive player is out when: a hit fly ball is caught, if a runner is hit fairly,-below the shoulders,-with the thrown ball from a fielder, but not hit behind the foul line.

A team is out when each player has had a turn at bat. The game continues until a round is completed or a time limit expires.

Comments: If desired a team can be out and teams exchange places when three outs are made on the offensive team.

TEE SOFTBALL

Equipment- Softball, softball bat, batting tee and four bases
Formation- Two teams
Objectives- Arm, shoulder, trunk and leg development, agility, directionality, running, jumping, sliding, eye-hand coordination, striking, object manipulation, throwing, catching, team play

Directions for Play- Softball rules are followed with the following exceptions:

1. The ball is hit on the batting tee placed on home plate.
2. An inning is over when each team player on both teams has a turn at bat. Teams switch when all players on the batting team have had a chance to hit. Three outs may be used if desired.
3. The catcher does not enter play until the ball is hit.
4. The pitcher plays the field from the pitching position but does not pitch.

Players are numbered by successive numbers on each team. This determines both batting order and fielding position. The fielders exchange positions in order each time players exchange positions. Number one is catcher, number two is pitcher, number three-first base, number four is second base, number five-shortstop, number six-third base, number seven-left field, number eight center field, and number nine-right field. Any additional players are consecutively numbered and play the outfield progressing to the next lowest number each time they go into the field.

Play continues for a number of rounds, innings, or for a designated time limit.

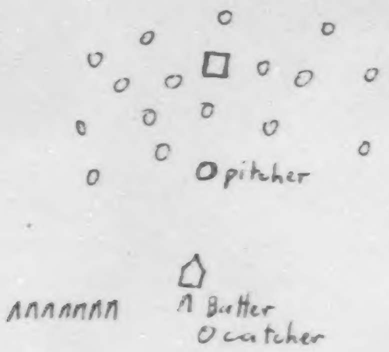
Comments: Keep as close to normal softball rules and play as possible. Make adaptions and modifications as necessary.

RUN DOWN

Equipment- Softball and two bases for each group
Formation- Groups of three, groups scattered in playing area
Objectives- Arm, shoulder, trunk and leg development, agility, directionality, running, stopping, sliding, throwing, catching, self image development, group play

Directions for Play- Two players stand one on each of the bases and throw the ball back and forth in a game of catch. The base runner stands on one base until he thinks the time is opportune to run to the other base. His objective is to start from one base and run to the other safely, without being tagged with the ball. When a runner is tagged out, he exchanges places with one of the base runners. A runner is out when tagged not on a base. The runner may stop and return to a base without penalty.

Comments: This is a game utilizing some skills of baseball and some basic movement skills. It is both a lead-up and a developmental activity. It can be used as both successfully. The self-image development and competition afforded by participation here should be taken into account in this game's use and the students who participate.



ONE BASE

Equipment. Playground ball, bat and two bases
Formation- Two teams, one in the field and one at bat
Objectives- Arm, shoulder, trunk and leg development, agility, directionality, running, stopping, turning, throwing, catching, object manipulation, eye-hand coordination, striking, team play, group interaction

Directions for Play- Divide players into teams. One team plays in the field and one lines up in batting order. Each player from the batting team takes a turn at bat. A pitcher from the fielding team pitches the ball underhand to the batter. When the ball is hit the batter attempts to run to the base and back to homeplate safely to score a point. The fielders attempt to retrieve and relay the ball so that a fielder can hit the runner before she reaches home plate.

A player is out if hit by the ball, below the shoulders; and if he swings at and misses four pitches.

Teams switch places when all players on the batting team have had a chance at bat. Three outs may end a teams' turn at bat if desired. Play continues for a number of rounds, innings, or for a designated time period.

Comments: A baseball field or large area is not necessary to play this game. It may be played inside or outside. The area for play must be sufficient for the hitting abilities of the players and type of ball used. If necessary, a "Nerf" ball may be used for an exceptionally confined area; or with severely handicapped students.

THE TEACHING OF GAMES

Methods in teaching games will vary with the type of games used and the size and type of the groups playing. There are, however, some general methods to consider in presenting any game material. These should not differ from other educational methods excepting as they are being applied to a specific type of material and activity. Methods for teaching games must consider:

1. Preparation
2. Steps in teaching
3. Explanation
4. The activity of the game itself
5. Organization of groups into game formations
6. Discipline

Suggestions for each of these follow:

1. Preparation
   a. As the teacher, know your game.
   b. Have equipment ready
2. Steps in Teaching Games
   a. Give the name of the game.
   b. Explain and demonstrate how the game is to be played.
   c. Play the game.
   d. Give further details and explanations of rules as needed
3. Explanation
   a. Unless the formation is scattered, it is best to get the group into the formation for the game before the explanation is given.
   b. In explaining, avoid talking too much and give brief, clear, and simple directions.
   c. Use a demonstration to help make the game procedure clear.
4. Activity of Playing the Game
   a. Use an alert pupil to start the game. A slower child not understanding the game will delay the interest of the whole group

b. Confusion results when the game is going badly. If you cannot correct without stopping the game, it is better to stop the game and straighten out the misunderstanding.

c. Be interested in the game yourself and show that interest in teaching it. Don't let the game drag. Stop the game before your group becomes tired of it.

d. Watch for the shy child - praise his efforts and make him feel a part of the group.

e. Watch for fatigue signs and over-strain.

f. Instill high ideals of fair play in your group through game activities. Be sure that all rules are observed.

g. Develop self-criticism, analysis, and judgment.

h. Encourage the losers to greater efforts.

i. Play with the group some of the time. The class volunteers should play all the time to serve as models for correct play.

5. Organization of Groups into Game Formations

   a. Use team organization in games whenever possible.

   b. See that children make circles quickly without pulling. A circle described on the floor is good to set up on.

6. Discipline

   a. Have the attention of the whole group. Don't allow talking while you are talking.

   b. Keep your group within control. Be sure everyone understands all directions and see that these are followed.

REFERENCE

Gallahue, David L., and Werner, Larry K., Physical Education Kindergarten Manual; Fort Wayne Community School Corporation, Fort Wayne, Indiana, 1965, pp. 32-34.

EXERCISES

EXERCISES

Exercises must of necessity be an integral part of this program. They will be used daily at the beginning of the class routine. However, no more than ten to fifteen minutes will actually be used for the exercise routine. This period of structured exercising is designed to suit the objectives for physical fitness and conditioning improvement.

The exercise period is as necessary a part of the gym time as the games and activities which make up the bulk of the time period. Like the activities, the exercises have a dual purpose. Conventionally, exercises have the objective description of strengthening, increasing endurance and flexibility, and improving agility. For sure these are adequate objectives for exercises. But these exercises also provide a learning, movement experience.

An exercise is a definite movement or set of movements which utilize the strength, flexibility, agility or endurance factors of the muscles to practice and improve these stated factors. The act of performance of the exercise also presents a definite movement experience, which in most cases for all students must be a learned experience. The importance and the uniqueness of exercise for the special student is the localization of movement in the exercises performed. Most exercises use only one set of limbs (arms or legs), or a close grouped set of muscles.

It is this localization of effort which makes exercises an easy to use and enjoyable form of movement experience. If exercises are approached from this standpoint, they become much easier for a teacher to present and for students to accept. The routine "Ho-Hum-Hum-Drum" which exercises usually excite can be put aside in favor of the enjoyment of the movement and the successful accomplishment of the learned task.

Repetition is a necessary fact of exercise performance. The difficulty of repetition can be lessened for the student by goalsetting and variety. When a student keeps track of the number of exercises done well and is able to show some observable improvement in the performance adjustment, interest is maintained and the routine becomes more exciting. If necessary, the teacher keeps track of repetitions and makes the student aware of improvement on present levels. A number of exercises, focusing on four factors and including all the main muscle groups, will be given in this section. Although there should be a balance of exercises for all muscle groups, use those exercises which seem to elicit the most interest and enjoyment. Also use a number of exercises to work the same muscle groups or body area. For example Pushups work the arm and upper chest and back muscles and the Seal Crawl does much the same thing but in a possibly more interesting manner.

One other area which has been aluded to earlier but must be detailed here, is the fact that these exercises must indeed be taught to the special student. As detailed earlier, the factors which are covered in these exercises, agility, strength, endurance, and flexibility, are factors which influence the student's ability to learn motor skills. It was also stated that these motor learning factors need to be learned unless they are present. These exercises are then the main pathway to the development of a missing learning factor. They also are an aid to the maintenance of these factors and other allied areas of health and physical fitness.

Take time for and put effort into the teaching and learning of each exercise. This means that during the time period alotted for exercise much of the time may be taken up with instruction and practice and not much exercise. As the students learn and their level of function increases, the percentage of teaching-learning time will decrease and the actual exercise percentage will increase. This teaching-learning time span will equal the normal learning or acclamation time of the students.

The exercises within this section will be divided into sub-sections of strength, endurance, flexibility, and agility. One or two exercises from each sub-section will be used for each exercise period so that the period will provide a total-body warm-up and work-out. The number of exercise repetitions a student performs will remain individualized. Use the test of tolerance, given in the wheelchair section as a basis for the individuals' exercise need and program.

STRENGTH

These exercises are specifically designed to practice and improve the factor of muscular strength. This relates both to the power and force of the muscles. Force being the muscular effort, and power the rate at which the effort can be produced.

Strength is probably the single most important factor of exercise. If it were not for strength the other factors are of no use.

The exercises for strength and the other subsections are given by difficulty and should be presented in this way. The exercises given do not, by any means, cover all the possible exercises which may be done for the same factors or muscle groups. The teacher will not be limited to the exercises given here but may use any acceptable and appropriate exercise which accomplish the same goals as this program.

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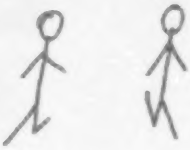
SEAL CRAWL

Equipment- None
Objectives- Arm, shoulder and trunk development, body image, directionality locomotion, variety
Position- Push-up position, body and legs kept as straight as possible, toes pointed away from the head, hands and knees, or toes only contacting the floor.
Action- Using the hands and arms only, drag the body along the floor. The feet are not used but dragged. If necessary the forearm and hand may contact the floor and do the pulling.

Comments: This may be used as a locomotor action in a relay. Use this exercise in place of push-ups if necessary, and as a movement variety. This is especially good for wheelchair students to do outside of the chair.



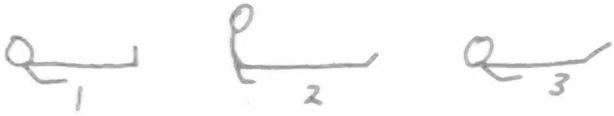
HOPPING

Equipment- None
Objectives- Leg development, cardio-vascular efficiency, body image, balance laterality, directionality, hopping skill development, agility
Position- Standing on one leg, the other leg held in a flexed position, may be held with the hand, arms on sides
Action- The student jumps on one leg only while the other foot remains off the floor. Begin by hopping first on the preferred foot, then have the students switch and hop on the other foot. When some skill has been developed, have the student hop on each foot in the following pattern:

1. Left, right, left, right
2. Two left, two right
3. Three left, three right
4. Four left, four right

Any or all of the sequence may be used. Make a challenge to the student to see how far he is able to progress. Go beyond four hops on each foot if necessary.

Comments: Hopping is a developmental skill which is also a good exercise. Most students at this age and developmental level should be able to or be ready to hop. If not, they can and should be taught this important movement goal. Hopping is an active movement which can be used in a variety of ways and can be quite a bit of fun.

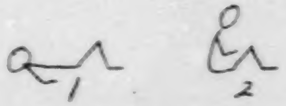


HEAD RAISER

Equipment- Mat (if necessary)
Objectives- Neck and trunk development, body image, balance and posture development

Position- Lie on the back, arms at the side, legs together
Action- Raise the head and upper back only from the floor. The motion is a rolling up of the body and not a stiff rise. Return to the starting position.

Comments : This exercise is designed to develop abdominal muscles used in the sit-up and should be used when the student is unable to do a sit-up without some assistance. The exercise may be done with legs straight or knees bent and feet flat on the floor. The latter position isolates the abdominal muscles.



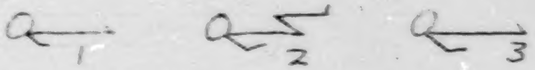
SIT-UP (and variations)

Equipment- Mats (if necessary)
Objectives- Trunk development, body image, balance and posture development
Position All three variations begin lying on the back. The difficulty in muscle groups used varies with the three positions.

1. On back, arms stretched overhead on the floor, legs straight
2. On back, arms stretched overhead on the floor, knees bent, feet flat on the floor
3. On back, hands together behind the head, knees bent, feet flat on the floor

Action- Raise up (roll up) to a sitting position and return to the starting position. In numbers two and three, the chest is brought to the knees. This may be varied with numbers two and three by alternately touching the elbows to the opposite knee.

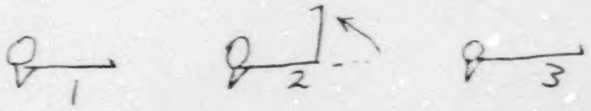
Comments: As with all exercises, speed is not required. The action should be a smooth continuous motion both up and down.



DOUBLE KNEE RAISE

Equipment- Mats (if necessary)
Objectives- Trunk and leg development, body image, balance, and posture development
Position- Lying on back, arms at the sides, legs straight
Action- Raise both knees to the chest or as high as possible bending at the waist and knees. Both legs should come up together. This can be varied by bringing one leg up at a time. Return to starting position, repeat.

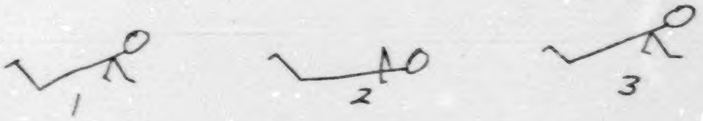
Comments: The student's head and back should remain on the floor. Some support to help hold the trunk down may be needed.



DOUBLE LEG LIFT

Equipment- Mat (if needed)
Objectives- Trunk and leg development, body image, balance and posture development
Position- Lying on back, hands behind the head, legs straight
Action- Lift legs together from the floor to a vertical position. Legs must remain straight throughout the entire action. Return to the starting position, repeat.

Comments: This exercise can only be used properly when the student's strength is such that the legs can be held in the proper position. Otherwise, use the Double Knee Raise exercise to develop and increase these necessary muscles.



KNEE PUSH-UPS

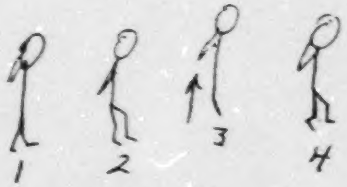
Equipment- Mats (if necessary)
Objectives- Trunk, arm, leg, shoulder development, body image posture development
Position- Hands and knees only touching the floor, the entire body is extended and straight from head to knees.
Action- Keeping the body straight, bend the elbows, lowering the chest to the floor. Return to the starting position, repeat.

Comments- The body must be kept straight and the feet do not touch the floor. Stress correctness in this exercise as much as possible. The knee push-up should be used as a lead up to the regular push-up.

PUSH-UPS

Equipment- Mats (if necessary)
Objectives- Arm, trunk and shoulder development, body image, posture and balance development
Position- The hands and toes or ball of the foot only touch the floor. The body from head to foot is kept extended and straight.
Action- Bending the elbows, lower the chest to the floor. The body must be kept straight throughout the action. Return to the starting position and repeat.

Comments- Both versions of push-ups may be done in a reverse action, that is, beginning from the floor, raise to the starting position as described and return. Be sure that the student lowers himself slowly and does not just drop, letting gravity do the work. As with all exercises this must be a slow and continuous motion.



SQUAT JUMPS

Equipment- None
Objectives- Leg development, agility, cardio-vascular efficiency, body image laterality, directionality, jumping balance and posture development
Position- Standing, feet slightly apart, one foot ahead of the other, hands together behind the head. Elbows to the side.
Action- Bend knees, the upper legs should not go beyond the horizontal position, jump upwards using the force of the legs only. Land in a half squat position and quickly repeat the jumping action.

Comments: If necessary the arms may be held at the side to begin and used in the action upwards to help the jumping and aid with balance in the air and on landing. A basic jumping ability is required to perform this exercise, if not present it must be taught: a knee bend or half-squat exercise may be used in its place.

ROPE CLIMBING

Equipment- Climbing rope, mats and spotters
Objectives- Arm, shoulder, and leg development, body image, directionality self image development
Position - The rope is place between the legs and the back of one leg, passing across the instep of that leg. The rope is held in place at the instep by the opposite foot. Hands hold the rope at or above the head level, one hand placed above the other.
Action- Pull the body up with the arms, releasing the foot holding the rope each time. The return to the floor is accomplished in reverse- hand-under-hand, controlling with the feet.

Comments : This is a difficult exercise but most beneficial when taken in the proper perspective. Quite a challenge is offered to the student's strength and self-confidence. Do not pressure the student as this may only increase pre-determined fears. Praise all attempts at approaching and attempting to climb the rope. Give as much physical and psychological assistance as seems to be required. Remember that the accomplishment of such a difficult task can be a great self-image and confidence builder, which is so very important for the mentally retarded and the handicapped student.

Be sure adequate mats and spotters are available and never allow students to attempt to climb without mats and spotters.

ENDURANCE

Endurance is a factor of physical fitness which allows the muscles to perform for extended periods of time. Second only in importance to strength, endurance of the muscles is necessary to keep the student performing at a level where maximum learning can take place. These exercises should be used along with strength exercises. When strength exercises are increased and performed up to and beyond the student's fatigue level, they become endurance exercises. When administering these exercises the student should be encouraged to perform as many repetitions as possible and exert a little extra effort beyond the fatigue level. Caution must be taken so as not to push the student too far. Always be sure that the student has no heart or respiratory difficulties. If these difficulties exist, this does not exclude the student from participation. It means that extra care must be taken and progress must be slower.

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MARCHING IN PLACE

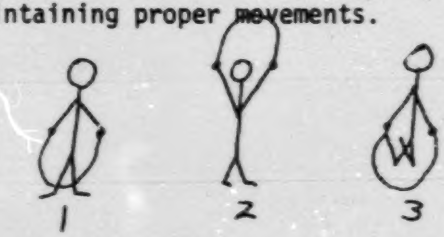
Equipment- None
Objectives- Leg development, cardio-vascular efficiency, laterality, walking gait development
Position- Standing erect, hands at side, begin on signal
Action- Lift one foot then the other approximately 3-4 inches from the floor. One foot remains always in contact with the floor. Swing arms in opposition to the legs. Encourage the student to keep a steady, rhythmic pace. Gradually increase the pace while maintaining the same lifting motion in even rhythm.

RUNNING IN PLACE

Equipment- None
Objectives- Leg development, cardio-vascular efficiency, laterality, running and walking, gait development

Position- Standing erect, arms flexed, begin on signal

Action - Lift one foot then the other off the floor in a running motion; knees are raised to hip level or as close to this as possible. Swing arms opposite to legs. Both feet are momentarily lifted from the floor at the same time. Encourage the student to increase speed and length of performance while maintaining proper movements.



ROPE JUMPING

Equipment- Jumping ropes

Objectives- Arm, shoulder, trunk and leg development, cardio-vascular efficiency, agility, directionality, temporal projection

Position- Standing erect, rope ends held in hands, rope touching the students heels. Begin on the signal.

Action- Turning the rope at the wrist, the rope swings forward over the head from back to front. Simultaneously, the student attempts to jump in anticipation of the rope. The object is to jump over the rope as it passes under the student's body. The jump must be timed so as to have both feet off the floor when the rope passes under. A syncronous action between arms and legs needs to be developed to allow for continous jumping. Gradually increase the number of consecutive jumps and the length of time the student jumps.

Comments: For the special student, particularly a student with severe perception and coordination problems, this skill is most difficult. The teaching-learning process must, of necessity, be a long and patient process. The Whole-Part method of teaching is required. Have the student attempt the entire skill following a demonstration. Then step by step, beginning with the starting position and progressing to the rope swing, back to front; then the jump over the rope. To teach the student he may swing the rope or another person or persons may turn the rope so as to isolate the jumping phase.

STAIR STEPPING

Equipment- Stairs or a securely anchored bench 5-7" high

Objectives- Leg development, cardio-vascular efficiency, directionality, temporal projection, walking gait improvement, posture development, body image

Position- Standing erect facing the stairs, arms at the sides

Action Use a 4-count stepping movement-up, up, down, down: left, right, left, right: or right, left, right, left.

(Count 1) Place lead foot on the step
(Count 2) Place other foot on step and straighten both knees
(Count 3) Place lead foot on the floor
(Count 4) Place other foot on the floor to complete this cycle
Repeat the cycle and increase the number of cycles and the time of performance.

FLEXIBILITY

The total possible motion which a joint is able to go through is due in part to the flexibility of that joint. Flexibility in a normal joint is dependent upon the length of the muscles, tendons and ligaments surrounding that joint. When muscles are strengthened they shorten. When joints are not moved through their full range of motion as a matter of force, the tendons and ligaments surrounding them become tight, thus restricting motion of the joint. It is for these reasons that flexibility exercises are important in any complete exercise program. A student who is not able to move his body up to the full potential allowed will not be able to learn new movement.

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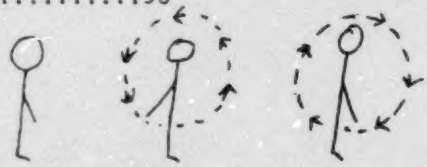
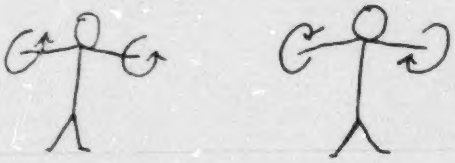


GIANT CIRCLES

Equipment- None
Objectives- Arm and shoulder development, body image, balance and posture development

Position- Standing erect with hands at sides
Action- Swing arms in large circles over the head and back to starting position. Keep the swinging motion in a horizontal plane as nearly as possible. Repeat in a continuous motion. Reverse motion.



ARM CIRCLES

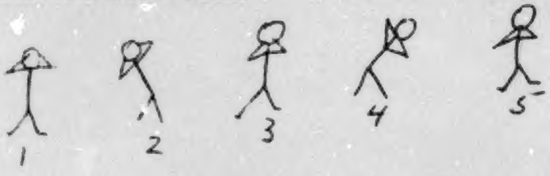
Equipment- None
Objectives- Arm and shoulder development, body image, balance and posture development
Position- Standing erect holding arms shoulder height
Action- Keeping arms straight, make small circles by rotating arms forward. Repeat continuously. The direction of rotation may be reversed.

Comments: These are relatively simple exercises and a somewhat enjoyable movement. Use variation of reversing motion or have student rotate one arm one direction and the other arm the opposite direction.

ARM PULL

Equipment- None
Objectives- Arm and shoulder development, body image, balance and posture development
Position- Standing erect with elbows raised shoulder height, palms down, fists clentched.
Action- Pull elbows backwards as far as possible. Return to starting position and repeat.

Comments: This exercise is best performed slowly with a smooth continuous motion. But it may be accomplished with the vigorous movement. Remember that forceful, vigorous stretching movements stretch the muscles more but may also strengthen and shorten muscles more than stretch them.

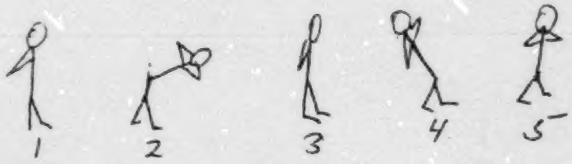


SIDEWARD BENDING

Equipment- None
Objectives- Trunk development, body image, laterality, standing posture and balance development.

Position- Standing erect, hands together behind the head, elbows shoulder height.
Action - Bend trunk to one side as far as possible. Return to starting position then bend to the other side as far as possible. Return to starting position and repeat.

Comments: The distance the student is able to bend will depend upon the flexibility and balance of the student. Encourage the best performance from each student. The feet should not move but remain stationary and flat on the floor.

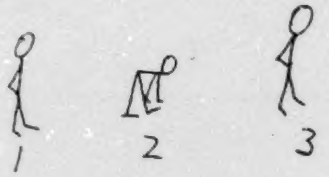


FORWARD AND BACKWARD BENDING

Equipment- None
Objectives- Trunk and leg development, body image, balance, posture development
Position- Standing erect with feet apart, hands together behind the head
Action - Slowly bend forward as far as possible. Return to the starting position. Bend backwards slowly as far as possible and return to starting position. Feet should not move.

Comments- As with the other bending exercises the degree of motion in any one direction depends upon the strength, flexibility and balance possessed by the student. Encourage the best performance from all.

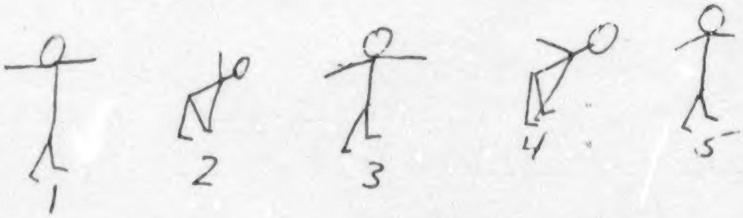
The side bending and forward-back bending exercises may be combined on one exercise with a four count movement combination. Count one-bend forward; count two-bend to the left (or right); count three-bend back; count four-bend to the right(or left); then return to the starting point and continue the cycle. Directions of bending may be reversed.



TOE TOUCHING

Equipment- None
Objectives- Trunk and leg development, body image, laterality, directionality, balance, posture development
Position- Standing erect with hands on hips
Action- Keeping knees locked, bend forward and touch the toes (reach down as far as possible). Return to starting position. Repeat.

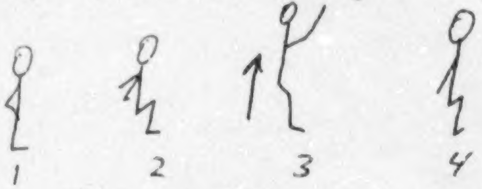
Comments: Any or all of these exercises may be difficult for the student to perform. Stress doing the exercise correctly more than increasing the number of repetitions. These exercises are not worth doing unless they are done right. The objectives cannot be achieved at all unless the exercise is properly performed.



WINDMILL

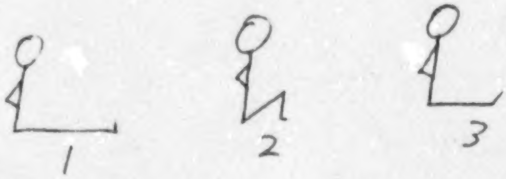
Equipment- None
Objectives- Trunk and leg development, body image, balance, posture development, laterality, directionality
Position- Standing erect, feet shoulder width, arm at shoulder level extended sideways.
Action- Keeping arms and legs straight, bend to touch right hand to the left foot. Return to starting position. Bend and touch left hand to right foot and return to starting position. Repeat cycle. Be sure the student returns to the starting position each time.

Comments; Be sure the student keeps the arm not touching in the plane of the shoulder.



JUMP AND STRETCH

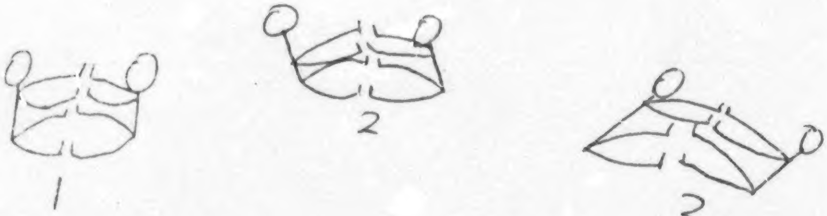
Equipment- None
Objectives- Leg and arm development, cardio-vascular efficiency, body image, balance, directionality, jumping, agility
Position- Standing erect with arms at the side
Action - Begin by swinging arms backward and bending at the knees. Stretching the arms overhead, jump as high as possible. ("Reach for the Sky"). Land in a semi-crouched position, ready to jump again. Repeat continuously as many times as possible.



LEG EXTENSION

Equipment- None
Objectives- Trunk and leg development, body image, balance and posture development
Position- Sitting erect on floor with legs extended (straight) hands on hips
Action - Bend knees, keeping feet on the floor, draw the feet toward the body. Return to starting position. Repeat.

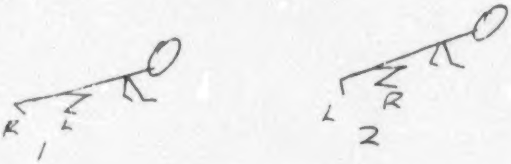
Comments- This may be a slow, smooth action (which is recommended) or a vigorous action. As a variation have the student attempt to push herself backwards, sliding along the floor.



PULL AND STRETCH

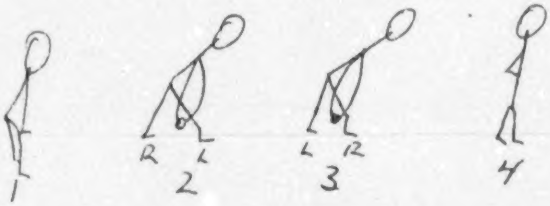
Equipment- None
Objectives- Trunk, arm, and leg development, body image, partner play (group interaction)
Position- Students paired, sitting on the floor facing each other. Legs extended and spread with the soles of the feet touching. Partners grasp each others hands.
Action- One student attempts to touch his chest to the floor as the other helps by pulling him forward. Partners reverse their actions and repeat the exercise.

Comments: This is a good partner activity. Be sure to stress the aspects of the partner relationships. Take care to avoid the instance where one student may pull the other beyond the point where he can't stretch, causing possible injury. Pair students by size as much as possible.



SPRINTER

Equipment- None
Objectives- Leg and trunk development, agility, cardio-vascular efficiency, body image, laterality, temporal projection, balance and posture development
Position- A push-up position with one leg flexed and the other fully extended
Action- Alternately reverse leg position in a continuous, rhythmical motion. Maintain the erect position of the body throughout the exercise.



BEAR HUG

Equipment- None
Objectives- Trunk and leg development, body image, laterality, posturing muscle development
Position- Standing erect with hands at sides
Action- Take a long stride forward with one leg. Encircle leg at the thigh with the arms- grasp hands under the thigh and pull up in a bear hug. Return to starting position. Repeat action with the other leg and continue alternating sides.

SAWING WOOD

Equipment- None

Objectives- Arm and shoulder development, body image, laterality, balance and posture development, partner play (group interaction)

Position- Students paired, standing facing each other, grasp hands, interlacing fingers

Action- Students pump arms alternately pushing and pulling each other slowly with a smooth, rhythmic movement. Gradually increase resistance. Without increasing resistance the speed of movement may be increased as long as the partners are moving together.

Comments: This is another partner exercise and should be administered in the same context as Pull and Stretch. Watch that students do not pull so as to cause one another to lose balance. Encourage students to remain in an erect stance throughout the exercise.

AGILITY

Previous to this point agility has been defined and described as the ability to move the body in an efficient and controlled manner. It is an indirect objective of this program to develop and improve the movement factor of agility. The games, activities and these specified agility exercises are designed to accomplish this objective.

The need and importance of a developed factor of agility within the individual has already been elaborated upon and will not be further discussed here. Except to say that these exercises are not a sidelight to the exercise section of this program they are a necessary and important part of this section and this total program. The exercise activities presented here can and should be used along with the three exercise areas already presented and served to round out the complete program of exercise needed for health and physical fitness.

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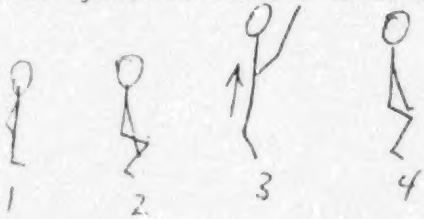
OVER AND BACK

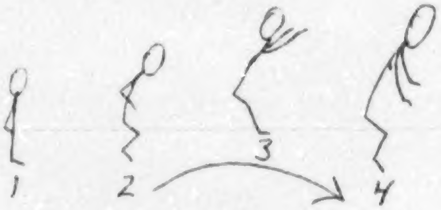
Equipment- Two lines 30' apart
Objectives- Trunk and leg development, agility, body image, directionality, running, stopping, turning, balance control (dynamic)
Position- Standing on one of the lines
Action - Run and touch the opposite line with the hand, return and touch the starting line. Repeat the cycle. This may be done by touching lines with the foot.

Comments Begin by repeating the cycle only once and gradually increase to not only work with agility, but include an endurance factor. Challenge the student by scoring the time it takes to complete a cycle and encourage him to increase this time or increase the number of cycles he is able to do within a set time period.



BLAST OFF

Equipment- None
Objectives- Trunk, arm and leg development, body image, balance, directionality, jumping, agility, running
Position - Standing erect with hands at the sides
Action - Move slowly to a full squat position with arms around knees. From this position ""Blast Off". Jump as high as possible. Land in a half squat position. Return to the starting position to begin another count down.



LEAP-JUMP

Equipment- None
Objectives- Trunk, arm and leg development, cardio-vascular efficiency, body image, balance, directionality, jumping
Position- Begin in a half-squat position, weight on the balls of the feet, arms back
Action- Swing the hands and arms up and forward. Jump up and forward as far as possible. Land in the half-squat position ready to repeat the jumping sequence. Continue to repeat as much as possible.

Comments- Be aware that the student must be able to first jump satisfactorily at least 3-4 inches from the floor in placebefore he may even attempt to do this exercise. Emphasize the use of the arms to pull the body up and out when the student jumps. Encourage students to jump out as far as possible and increase both distances as well as number of successive jumps.

RUN AND STOP

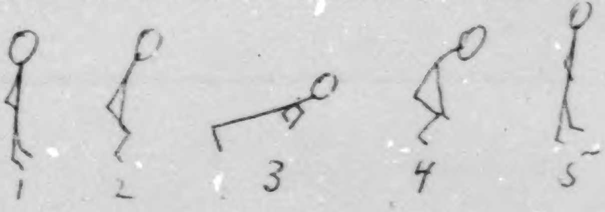
Equipment- A room large enough to allow much free movement

Objectives- Leg development, agility, directionality, spatial perception, depth perception, movement in relation to a moving object, self-image development, group interaction

Position- The entire group is scattered within the designated boundaries.

Action- On the starting command all students begin to move about following any path or direction within the area. Changes in direction must be made so as to avoid contact with other players. On the command "Stop", all players must stop in place. Movement continues once again on the command "Go". Continue the activity varying the intervals between the stop and go signals.

Comments- To begin with, have students walk then gradually introduce running within the play area. The social group interaction possibilities within this activity are great. For our purposes this fact is part of the objectives but the specific concern will be the primary objectives. Emphasize the skills and abilities of the student's movement within the group with the secondary object of social interaction skill development.



SQUAT THRUST

Equipment- None

Objectives- Arm, shoulder, trunk and leg development, agility, body image, balance, temporal projection, posture and balance control

Position- Standing erect with arms at the side.

Action- Bend at knees and place the hands on the floor assuming a squat position. From this position thrust the legs backwards to assume the push-up position, then return to the squat position. From this position thrust the legs backward to assume the push-up position, then return to the squat position and stand erect. Repeat this cycle.

Count one - standing; count two-squat; count three-push up position (a push up may be done here); count four-squat; count one-standing.

Comments: If the student has difficulty in performing this exercise teach by steps and "chain" one step into the next as in Part-Whole teaching.

1

2

3

JUMPING JACKS

Equipment- None
Objectives Arm, shoulder, and leg development, agility, coordination, cardio-vascular efficiency, body image, laterality, temporal projection, jumping, balance and posture control.
Position- Standing with hands at the sides, feet together
Action - With a simultaneous motion jump to a side straddle position, feet spread shoulder width, as hands clap together overhead. Return to starting position. Repeat.

Comments: Jumping Jacks or side-straddle hops is a difficult exercise to learn and perform as far as motor agility and coordination factors are concerned. A suggested teaching sequence would begin with the jump and straddle phase; proceeding to the addition of the simultaneous motion of clapping the hands together; then to the return to starting position following this. When the student begins to jump and straddle adequately, introduce clapping by having the student clap hands at chest level as the legs jump and straddle, then gradually raise the level at which the hands clap up to their prescribed above-the-head placement.

WHEELBARROW

Equipment- None
Objectives- Trunk, arm, and shoulder development, body image, directionality, walking and running, posture and balance control, partner play, (team work)
Position- Students paired, one partner standing, holding the other partner's ankles at waist level. The second partner assumes the push-up position with hands only contacting the floor.
Action- The standing partner drives the "Wheelbarrow" by directing the movement of the down partner, who progresses forward, using the hands and arms only for propulsion. Set a designated distance for the partners to move. The partners switch places and repeat.

Comments: This is a good relay activity.

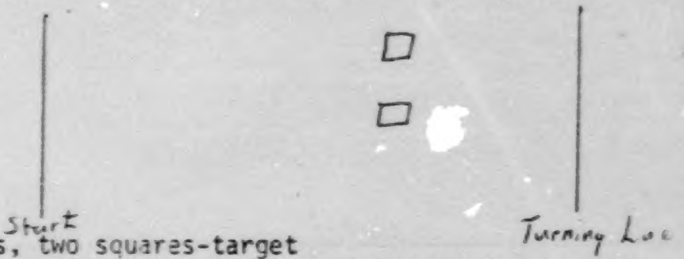
DIRECTIONAL MOVEMENT SERIES

Equipment- None
Objectives- Arm, shoulder, trunk and leg development, agility, body image, laterality, directionality, locomotor variations, walking, running, stopping, turning, mirror image reactions, following directions
Position- Standing with hands at sides to begin with. On all fours,(hands and feet-4 point,or hands and knees-6 point), for the third activity. This series may be run as three separate sets or as a three part exercise.

1. Running in Place- While running in place turn to the right, left, front, or back of the room as directed by the teacher or mirroring the movement of the teacher (example- when the teacher turns to the left, the student turns to the same direction but this is the student's right).
2. Running- While facing in one direction, begin by running in place, then move forward, backwards, to the side, right and left, as indicated by the teacher or the mirror movement of the teacher.
3. Running on All Fours- Assume the hands and feet position. While in this position, maintain the head in one direction, watching the teacher; move forward, backwards, right or left mirroring movement or following directions.

Comments: This activity can be done individually, in small groups or as an entire class. Encourage the students to watch the teacher and follow both commands and movement. Choose an able student to be leader and vary the series position.

BEANBAG PICK-UP



Equipment- Four or more beanbags, two squares-target
Objectives- Arm, shoulder, trunk and leg development, agility, body image, directionality, temporal projection, running, stopping, turning, grasp, release, throwing, target perception, series movement awareness, self-image development.
Position- Standing on the starting line with a beanbag held in each hand
Action- The student runs to the turning line placing the bag in the right hand on the square to the right, then placing the left-hand beanbag on the left square. Run to the turning line and touch the line with the foot. Return to pick up the beanbag, first the left, then the right, and run to the starting line. Repeat.

Comments- This is a good activity for individual work or a challenging relay between teams. Stress speed and proper pick-up sequence. This makes the student think as well as act.

WHEELCHAIR ACTIVITIES

WHEELCHAIR ACTIVITIES

The following activities are designed to provide physical activity for students who are confined to wheelchairs for all or part of the day. For the most part it will be taken for granted that the individuals are multiply-handicapped, meaning both mentally and physically handicapped. Each activity will be for individual or small group utility. However, many may be adapted to suit the individual student, and the factors of the environment.

As far as is feasible all of the activities will follow closely with the sequential levels of motor development. The areas to be covered will be locomotion, manipulation, stability, and strength-conditioning. These areas will be covered both within and outside of the wheelchair. The emphasis of all activities will be placed upon adaption to and utilization of the wheelchair. Activities outside of the wheelchair will be for all students. These activities will range from transfer from wheelchair to another appliance, activities for developmental locomotion, manipulation, and/or stability. Prerequisite to all activities will be associative strength and conditioning exercises.

Those wheelchair students who are handicapped by cerebral palsy, paresis of any or all extremeties, or other neural or orthopedic handicaps are of special consideration. For the most part, these people are not able to participate in many of the activities included in the regular motor development program. For this reason it is most necessary to provide activities which will satisfy necessary developmental objectives for physical education. The same objectives for the regular motor development program apply for all students as far as can be suited to the individual circumstances.

Strength and Conditioning Exercises

For the wheelchair student, muscle strength and fitness conditioning are most important. Because of the sedentary nature of the lifestyle imposed by the wheelchair the buttocks and thigh are continually in contact with the chair seat. The skin and underlying tissue become deteriorated and can break down causing sores. This can be avoided by changing the position and improvement of blood circulation. Exercises can achieve both objectives along with increasing strength and overall physical conditioning. The best level of independence requires good strength and physical fitness which is another important objective.

Exercises in Wheelchair

Push-ups

Objectives- Increase strength in upper extremeties and shoulder girdle.

The client is seated in the wheelchair with hands holding arm rests. The thumbs are on the inside and the fingers on the outside to begin with. The client is directed to raise himself from the wheelchair. Following each push-up (repetition) hand position is shifted-first so that the fingers are parallel with the arm rests; and second with the fingers and thumb holding the arm rest on the inside. There are then three positions-fingers outside, parallel, and inside. The push-ups are then accomplished in sets of three repetitions with a new position for each repetition.

The lower and upper back should remain straight; the student should not lean either forward or back. For variation and to build strength in the pelvic girdle and lower back the legs are held at a 90 degree or 45 degree angle from the chair while lifting with the arms from the chair.

Leg Lifts (quad setting)

Objectives- To increase strength and flexibility of the legs, especially the quadriceps muscles and the muscles of the lower pelvic girdle.

This exercise has three positions. The feet start flat on the floor or the foot rests, whichever is easiest for the student. The first position is with the knee straightened. Hold this for one count. Move the entire leg into a horizontal position for the second position. Then raise the entire leg above horizontal as far as is possible. Each of these positions is held for one count then the leg is lowered slowly to the starting point.

It may be necessary to instruct the student on the performance of this exercise. Show the student each position by moving his leg to that position and holding it there, then moving to the next. Be sure that he is aware of position number one, position number two, and position number three.

For the student who is very weak it will be necessary only to do number one. This should be continued until the student is able to do five repetitions of number one, then add number two. Do number one and number two together until the student is able to do five repetitions, then add number three.

This exercise may also be varied by placing the student's feet on a bench or chair and have him left from that point as far as possible and hold for one count, then lower slowly.

Walk-up

Objectives- To increase strength and flexibility of the upper front and lower legs and feet.

With the student seated in the wheelchair and the breaks on, position the student facing a wall so that his toes touch the wall. Direct the student to move his feet so that he walks up the wall. He should walk up the wall as far as he is able. Marks can be placed to designate points to be reached and levels achieved.

Wall Push - Front

Objectives- To develop an increased strength and flexibility in the arm and shoulder girdle associated with moving the wheelchair forward.

The student is seated in the wheelchair in the normal seating position. He should be facing the wall with his toes touching the wall. Holding the wheels by the grip the client pushes the chair slowly into the wall. Pressure should be slight and build until the student is exerting full force into the wall as if he were attempting to move it. Then slowly release until muscles are totally relaxed. The grip may be reversed so that the thumbs are to the outside. For this the grip should be more to the rear of center so that the arms are fully extended.

Wall Push - Rear

Objectives- To develop and increase strength and flexibility in the arm and shoulder girdle associated with moving the wheelchair in reverse.

The student is seated in the wheelchair in the normal manner. The back of the chair is touching the wall. Gripping the wheels by the handles the students slowly exerts force as if to push the wall. Force should increase until the student is exerting maximum force or the wheels begin to slip. Then release slowly until muscles relax. The hand grip may be reversed so that the thumbs are on the outside. For this the grip should be a little forward on the wheel.

Wheel Grip Push-up

Objectives- To increase strength and flexibility in the muscles in the arm, shoulder girdle and chest.

This exercise is much the same as the push-up exercise given above. With the hand gripping on the wheel, rather than the arm rest, the chest muscles (pectoralis major and minor) are used to a greater extent. The client is seated erect in the chair with hands gripping the wheel grips. The thumbs are to the inside and remain there throughout the exercise. It is important that the breaks are engaged. The hand grip should be at a point in the center of the arc of the wheel. A vertical line bisecting the circle from the hand to the floor should cross the center of the circle and form a right angle to the floor.

From this position the client raises his body from the seat of the chair by using his arms only. As a variation the legs may also be held parallel to the floor as the push-up is performed. This aids in the strength of the abdominals and pelvic girdle muscles.

Chair Pick-up

Objectives- To increase strength in the arm and shoulder girdle muscles.

This exercise is an isometric type exercise as are the wall push exercises. This means that the muscles do not move an associated body part. Because of this stretching and/or flexibility exercises must be used along with these exercises.

The student is seated in the chair, hands grip the wheel grip, thumbs to the inside. Breaks are engaged. Force is exerted upward as if to lift the chair from the floor. Maximum force is reached slowly held for a two-count (1-2) then released slowly.

Controlled Leg Movements

Objectives- To increase strength and flexibility in the legs and feet.

The client is seated in the chair with toes touching a wall not more than 6-8 inches from the floor. Hands gripping the wheels tightly. The student pushes out from the wall with the legs while the arms push the chair to the wall. Essentially the arms are controlling the movement of the legs by opposing resistance. When full extension is reached by the legs the arms then push the chair to the wall as the legs resist.

If the student is unable to use his arms another person may act as the arms would in opposition to the force of the legs.

Care should be taken to prevent the chair from tipping over backward. Ultimately this would mean that the student is able to balance the force of the arms and legs. Until the student is able to do this another person will need to be present to prevent tipping.

Toe Touches

Objectives- To increase strength and flexibility of lower back and shoulder girdle.

The student is seated in the chair. A "Posey Belt" or other restraint should be around the student's waist if there is a chance of falling from the chair. This belt should not restrict movement above the waist. The brake should be engaged. Instruct the student to bend forward and touch his toes with his fingers. The feet may be on the foot peddles or on the floor just ahead of the wheels, so that the legs are straight. The latter position is recommended if possible.

After touching toes and holding for one count, the student slowly returns to the starting position. Do not allow the student to bounce while bending or make quick forceful movements going up or down. All movements should be smooth and controlled.

Bent Leg Raise

Objectives- Increase strength and flexibility of upper legs, thigh, and hip muscles.

The student is seated on the chair with feet flat on the peddles or on the floor. Slowly raise one leg, keeping knee flexed, as high as possible. Grasp the leg from behind the knee and pull to the chest.

Do not allow the student to lean forward to touch the leg. The leg must be pulled to the chest. The student must remain in the sitting position. Alternate legs, first right then left. Lift both legs together and pull both to the chest. This must be one complete motion as far as possible. Assistance may be needed to help the student keep a complete motion without stopping.

Rear Hand Push Exercises

Objectives- Increase strength in hands, arms and shoulders

The following group of exercises are done with the wheelchair back to the wall, handles touching the wall. The wheelchair brakes should be engaged. The student is seated comfortably in the chair. These are isometric exercises so a 10-count build-up, hold, and release should be used. Built-up one to five hold six to seven, and release eight to ten. An isotonic (moving) exercise may be accomplished by releasing the wheelchair brakes and providing resistance with the student's feet or some other outside resistance force.

1. Position- Arms up, elbows bent, hands placed on the wall with fingers pointing down.

The student pushes the wall with the hands and arms. Place emphasis on keeping the student's elbows pointed up. Point out and encourage pushing with the fingers. A small amount of movement is possible so have the student push so that the hand is moved from the wall, and the finger tips only contact the wall. This movement should be slow so that the student is able to feel the motion at each joint of the finger.

2. Position- Arms down, elbows slightly flexed, hands on the wall, fingers pointing down.

The student exerts force against the wall so as to push away from it. As with the above exercises a small amount of movement is allowed at the wrist and hand. Utilize this motion and any combination of isometric and isotonic exercise. The isotonic motion follows the isometric routine.

3. Position- Arms shoulder height, the back of the hands contact the wall, fingers spread.

4. Position- Arms shoulder height, the palm of the hands contacting the wall.

The student pushes against the wall with arms and hands. Some assistance may be required if the student is too weak to hold the arms in position. This exercise may be done with only the upper arm contacting the wall and the elbows flexed.

Front Hand Push Exercises

The following group of exercises are done with the front of the wheelchair touching the wall. The foot peddles may be removed if possible. In this case the student's toes and knees will contact the wall and the brakes should be locked. In either case the brakes are locked and some precaution should be made to prevent tipping the wheelchair backwards.

1. Position- Arms held shoulder height, elbows bent, hands on the wall, fingers pointing toward the fingers of the opposite hand and touching.

The student pushes against the wall, using the hand arm and shoulder muscles. An isotonic exercise is accomplished when the student leans forward and pushes his own weight back with his arms. Extra force may be added by pushing on the student's back at the shoulders. This additional resistance force would call for the use of the lower back muscles also.

2. Position- Arms held at shoulder height, elbows straight, hands touch wall, fingers spread.

The student pushes against the wall with the full force of the hands and wrist, arms and shoulders. A small amount of motion is available for an isotonic movement at the fingers and wrist joints.

3. Position- Student bends forward at waist so that the forehead touches the wall, elbows flexed, palms of hands and forearm touch the wall, fingers pointed up.

This is a combination isometric and isotonic exercise. It provides exercise for the back, shoulder, arm, and hand muscles. The exercise requires some control and is, at the isometric phase, a contest of the arm and shoulder muscles with the abdominal muscles. The isometric exercise is performed first, pushing with all involved muscles. The abdonimal muscles are primarily involved in maintaining position against the opposing force of the arms, shoulders, and hands.

4. Position- Wheelchair up to or under a table, elbows flexed, hands only on the table, palms down.

The student pushes down with the full force of his arms, shoulders and hands. Her back should remain in contact with the back of the wheelchair. This exercise may also become an isotonic exercise for hand and wrist following the isometric phase.

It may become evident in this exercise and others that the abdominal and lower back muscles are used to an extent, not in movement but as stabilizers of position. In this exercise force can be exerted so as to raise the body from the chair. The actual isometric force should not do this and is aided by the controlling opposition of the abdominals. The student should be made to realize this effect and utilize its full potential for three reasons. First, because it increases overall body awareness. Second, because it allows a more forceful isometric performance. Third, the abdominal muscles are not used in a specific exercise in a wheelchair and must be utilized in some form of in-chair exercise.

Side Hand Push Exercises

The wheelchair is positioned so that its side is to the wall for the following exercises. The student is seated comfortably in a chair, at arms length from the wall. The exercises are done first on one side, then the other. The chair will need to be changed each time. When doing two or more exercises in this group together, do the right side first, then move to the wheelchair to do the left side.

1. Position- Arms held shoulder height, a slight bend at the elbows, palms of hand touching the wall, fingers spread and pointing up.

The student pushes to straighten the elbows then pushes the hands away from the wall until the finger tips only touch the wall. This should be done slowly and completely, utilizing every muscle of the arm and hands.

2. Position- Arms held at shoulder height, elbows straight, palms of hands contacting the wall, fingers pointing up and spread.

The fingers only push out and away from the wall. Isometric and isotonic opposition is applied by abdominals and shoulder muscles.

3. Position- Same as number two except the back of the hands and fingers contact the wall.

Movement is the same utilizing both isometric and isotonic exercises. It is recommended that this exercise be done with the elbows straight, but it may be performed with the elbows flexed as well.

The following group of exercises may be accomplished in the chair at anytime and anywhere.

Armrest Push Down

Position- Forearms resting on the armrest, elbows flexed, hands not contacting the armrest.

Action- The student pushes down on the armrest with the full force of the arm and shoulder muscles. Stabilization, opposition, is exerted by the abdominal and lower back muscles. Force should continue up to the point just before the body is raised from the chair, and held. An isotonic exercise may be instituted in combination or separate from this exercise. This would be a form of a push-up.

Armrest Pull Up

Position- Forearms placed under the overhang of the armrest, elbows flexed, hands not contacting the armrest, palms facing in or down, a slight pressure should be exerted inward to hold the forearm in place.

Action- With palms facing in or down, the action is the same. The muscles of upper arm and shoulder pull up on the armrest. If the armrests are adjustable up and down, they should be securely tightened prior to performance of the exercise.

Hooked Arm Pull

Position- Arms hooked at the elbow around the vertical bar of the rear handles of the wheelchair.

Action- The student pulls foreward with muscles of the upper chest, abdomen, arm, and shoulder. Oppositional force is exerted at the lower back. The head should remain straight and not bend forward.

Wheelchair Sit-up

Position- The chest touches the upper legs, arms and hands on the outside of the legs.

Action- The student slowly raises to a sitting position, first lifting head and neck then the shoulders and the back. If the student has an exceptionally weak lower back some assistance may be given by grasping the shoulders from the rear and pulling up and back. The student can provide assistance by grasping the rim of the wheels with each hand. Resistance can also be applied by another person on the shoulders of the student.

This is an important exercise for those who may be confined totally or for a long period of time to the wheelchair. The lower back takes much of the upper body's weight when sitting and requires support, although some or all weight may be transferred to the arms or legs and buttocks, proper position is maintained by the strength of the back muscles.

Front Wheel Touch

Position- The student begins in the sitting position in the chair. She may hold arms at shoulder height.

Action- The student begins to bend at the waist and reaches with the right hand to touch the left front wheel; then returns to the sitting position. This action is repeated with the left hand to the right front wheel. Be sure that the student's back is held as straight as possible, with no bend or curve. This may be difficult at first but should be a goal to work for.

A belt or safety strap may need to be secured around the waist of the student to avoid falling from the chair. The brakes should also be engaged.

Floor Touch

Position- Starting in the sitting position in the chair.

Action- The student bends to the side attempting to touch the floor with his hand on that side. Begin with the right side then the left. Encourage the student to reach as far as possible. If the student is unable to reach the floor, make marks on the wheel and encourage reaching past marks already reached. These two exercises are good for stretching and strengthening the lower back muscles and the abdominals which may be tight and shortened due to the lack of use while sitting.

Leg Exercises

The following exercises are designed to stretch and strengthen the muscles of the lower leg, foot and ankle. They are all done in the sitting position in the wheelchair and require that the student have his shoes and socks off. And in some cases there is a bit of coordination to perform the exercises. This must be taken into account before prescribing the exercise for a student. Some assistance may be required for the student to adequately perform the exercise.

Pick-up Inverter

Action- Pick up a wad of paper or other soft, small object with the toes and place it in the opposite hand. If the student is unable to pick up an object, have him flex his toes as if picking up an object and keep flexed while bringing the foot to the opposite hand. This should be repeated with each foot.

Pick-up Everter

Action- As with above, pick up an object with the foot and place it in the hand on the same side. The action may be performed as above without an object.

Toe Flexor Exercise- A towel is needed for this exercise.

Action- Place the feet on the end of the towel. With the toes pull the towel under the feet. If the towel proves too difficult, use a handkerchief or washcloth.

Toe Raisers

Position- The student leans on her legs and applies pressure at the knees with her hands. A weight or barbell may be placed on the knees.
Action- Raise the heels from the ground and repeat several times. Three sets of ten repetitions should be sufficient.

Leg Scratcher

Action- With one leg straight, (knee extended) place the opposite foot on the shin, pointing with the big toe. Slowly bring the foot up the shin as far as possible, keeping the toe on the leg. Repeat one to five times with each leg.

Chair Walking

The position of the feet vary with this exercise but the action is the same with each of the three variations.

Position-
1. On the outside of the feet, toes curled inward.
2. On the inside of the feet, toes curled inward.
3. Feet flat in a normal walking position.

Action- The student walks in the given position for 10-15 yards first forward than backward. Some assistance may be given to help the student move the chair, but the position of the feet must be held by the student. Gradually release aid, allowing the student to move the chair more and more on her own.

TESTING FOR INDIVIDUAL EXERCISE TOLERANCE

Before any exercise program may be initiated, it is necessary to find the tolerance for present fitness level of the student. Evaluation is made for each exercise to be within the program.

To test for fitness level, the student performs the exercise properly as many times as is possible. The number of repetitions is recorded. This number minus two (2) is the number of repetions to be prescribed to begin with. Each set will be at least one repetition.

Exercise repetitions will be increased periodically as the student's strength and condition level increase. Increments should not exceed one to two repetitions per set. No set should include more than five repetitions unless prescribed. There should be no more than three sets of any one exercise.

This simple test may be administered by anyone but the results must be approved by the physical education director.

APROACH TO
ADULT REHABILITATION
CLASS (ARC)

APPROACH TO THE ADULT REHABILITATION CLASS (ARC)

The main crux of this program, so far, has been with the young adults moving into the world of adults and preparation for this new form of work and life. What then is to be done with adults living under the circumstances where they are not yet at the ability level of eligibility for even the pre-vocational class, yet adults and entitled to take part in all of the adult-life enjoyments and in some form of acceptable recreational life and leisure time activities? These people need to be given the opportunity to develop themselves to their highest capacity.

When an individual reaches some landmarks of adult life, this does not mean that life drastically changes or slows down. This is not so for a normal adult and just as "not so" for the sub-normal functioning adult. The ARC presents a similar circumstance but unlike the average mentally retarded adult; this class of individuals is very low functioning, in or near the severe or profound range and in many cases multiply handicapped.

These persons cannot hope to reach the near-normal expectancies of thier younger counterparts who have been through comprehensive educational programs and will have received a great amount of experience and training in the areas necessary for their expectant future life form. For this reason and others, this program will take the approach of creating for these special persons a situation where they can find and participate in more worthwhile and satisfying activities for the time being and for their future.

This last statement is not by any means intended to express the idea that no progress or drastic change may indeed occur with the class and its individuals because of this program. The factors of mental retardation, functioning levels, and handicaps are oftentimes a relative concept and definetly not absolute factors. These factors are subject to change and it is hoped that this program will be the direct or indirect cause of some of this change. The main purpose for these individuals would be to increase their enjoyment of movement and group play, develop basic skills and abilities in the areas of physical, social and intellectual functioning and enhance their feelings of independence and self-worth. Because it is often difficult to project into the future of their lives it will be necessary to build the needs for the present and near future. Do those things which are progressive for the time, without respect for an eventual work placement or new life style. The ultimate goal is to get them to the point where they are able to enter a progressive program phase or to get them above the seemingly unceasing developmental plateau on which they are so unnecessarily sitting. This then is the approach philosophy to the ARC for this time. It is expected that with changes caused by this program and changes outside this sphere and attitude changes of all concerned a new approach may be written at another time.

EVALUATION

EVALUATION

As with any program where progress and goal achievement are expected there must be a means of objectively making evidence of these changes of behavior. For this purpose a comprehensive test of motor development has been devised to be used as a part of this program and the total motor development program of this agency.

The Logan School Test of Motor Development is a test to measure present levels and level changes in the area of motor development. This program actually covers much more than motor development as explained in the introduction. The areas of skills and abilities which this program intends to elicit change are presented in the objectives section. Many of these standard objectives include some motor development goals. But the importance of the objectives lie outside of the motor development area and in physical and mental education. Specifically the program is attempting to teach the vast number of skills and abilities necessary for well rounded recreational-leisure time pursuits in a normalizing adult world.

The LSTMD does not test or evaluate these designated skills or abilities. Therefore, a great deal of subjective evaluation of students and class groups will need to be done by teachers, aids, and volunteers. All should be aware of the objectives of this program. Knowing this and the needs of the students, each individual acting in a directory capacity with the students in gym class should be constantly evaluating needs as related to the objectives, and progress in goal achievement.

The greatest amount of evaluation will then be highly subjective in nature. This is not necessarily reliable unless the persons involved in evaluation can, themselves, introduce a sence of objectiveness to their personal observations. This abstract objectiveness is most important to the continual progress and success of this program and to the possible forming of a screening test or other instrument which could test and evaluate student behavior changes as related to the objectives of this program.

For the time being, these two methods of evaluation will be used. The objective tests (LSTMD) and the subjective observations of all who work with the students. It is expected that these observations and results will be used effectively to prepare new and additional objectives and necessary program changes and improvements.

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